

A

A

0 0 0

5 4 1

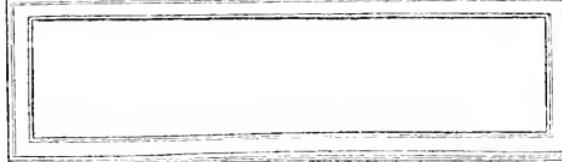
4 8 4

2



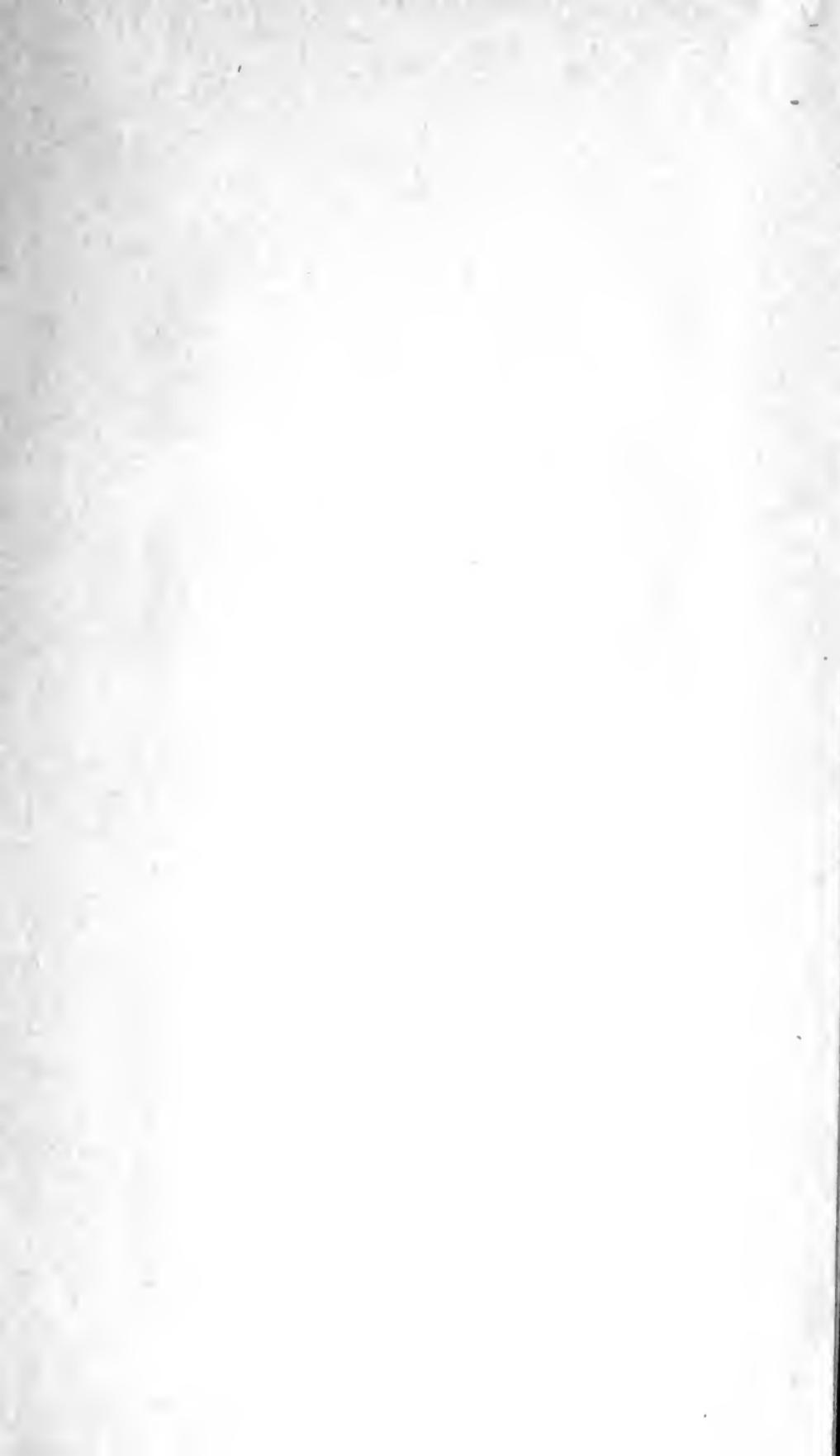
14 SOUTHERN REGIONAL LIBRARY FACILITY

UNIVERSITY OF CALIFORNIA
AT LOS ANGELES









Digitized by the Internet Archive
in 2008 with funding from
Microsoft Corporation

NOTES

ON POLITICAL ECONOMY.

POLITICAL ECONOMY.

BY J. N. CARDOZO.

1850

CHARLESTON:

PRINTED BY A. E. MILLER

4, Broad-Street.

3306 8

—

1826.

District of South-Carolina.

BE IT REMEMBERED, That on the twenty-ninth day of March, Anno Domini, one thousand eight hundred and twenty-six, and in the fiftieth year of the Independence of the United States of America, J. N. Cardozo, deposited in this office the title of a book, the right whereof he claims as Proprietor and Author, in the words following, to wit:

“ Notes on Political Economy. By J. N. Cardozo.”

In conformity with the act of Congress of the United States, entitled “An act for the Encouragement of Learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies, during the times therein mentioned,” and also an act entitled “An act supplementary to an act, entitled, ‘An act for the encouragement of learning, by securing the copies of maps, charts, and books, to the authors and proprietors of such copies, during the times therein mentioned, and extending the benefits thereof to the arts of designing, engraving and etching historical and other prints.’”

JAMES JERVEY,
Clerk of the District of South-Carolina.

161
C.17n

TABLE OF CONTENTS.

PREFACE, - - - - -	1
INTRODUCTION, - - - - -	5
CHAPTER I.— <i>Rent</i> , - - - - -	19
II.— <i>Wages and Profits</i> , - - - - -	39
III.— <i>Machinery</i> , - - - - -	58
IV.— <i>Value and Price</i> , - - - - -	63
V.— <i>Money</i> , - - - - -	75
VI.— <i>Exchange</i> , - - - - -	96
VII.— <i>Commerce</i> , - - - - -	103
VIII.— <i>Taxation</i> , - - - - -	116

46.25513



PREFACE.

THE great abilities which have been brought to the investigation of the laws relating to the production, distribution and consumption of wealth, would seem to render any thing further on the subject unnecessary. But we have seen system succeed to system both in the practice of statesmen and in the works of the most profound and inventive minds, and the theorists are not more reconciled among themselves as to the true principles of public wealth, than are those who direct the destinies of states. This fact proves that truth makes its way much more slowly in those sciences that depend for their improvement on the true import and proper application of words than in those wherein precision of language can be more completely attained. The moral stand in contrast to the mathematical and physical sciences in this respect. Political Economy, of all subjects of analysis, seems peculiarly open to this disadvantage.

The spirit of system, it must be confessed, has also been among the most powerful of those circumstances which have caused endless disputes between those in whom the love of paradox and disputation has super-

seded a regard for truth and affection for mankind. The influence of paradox on the strongest minds is, indeed, every way remarkable. We know that the sect of the **Economists** exerted no small power over the opinions of many of their most enlightened contemporaries. Their minds were captivated by the novelty of an ingenious hypothesis—it has been long supplanted by others not less ingenious. In our day the love of novelty and refinement has given birth to one that is equally specious and captivating from the apparent simplicity of its results, or from the generalization it seems to offer of the complicated phenomena it professes to explain. It is however destined to perish in its turn. We allude to the theory of Mr. **RICARDO** as developed in his work “*On the Principles of Political Economy and Taxation.*” It is remarkable, in this instance also, that some of the most powerful intellects that were ever devoted to the investigation of such subjects have been seduced into admiration of this system, which exhibits in its developement specimens of rare analytical talents not only in the author, but his two principal supporters. It is only necessary to name the names of **MILL** and **M'CULLOCH** in *England*, to be convinced of this fact. They are destined to extend the reputation of this theory by the clearness of their style, and their admirable powers of illustration.

A condensed view of this theory has been lately presented to the American public by one of our public*

* Originally published as an article in the *Edinburgh Supplement to the Encyclopedia Britannica*. Mr. **M'CULLOCH**, who has enriched this work with many valuable dissertations on the science of *Political Economy*, is the author of this article.

Professors. Mr. M'VICKAR, of Columbia College, New-York, has edited this abridgment, and added to the text some valuable notes. Now it is the apprehension of the effect of that work (which is as far as it goes well calculated for a popular manual) that has induced the author of the following sheets to publish the results of some investigations on the subject which were originally intended for his private use. They are given to the Press with every respect for the talents of Mr. RICARDO and those of his distinguished supporters. We are in fact well convinced that if the principles of this theory (which are founded on circumstances completely contrasted to those that are peculiar to our own country) should be adopted as texts for lectures in our Colleges and Universities, it will greatly retard the progress of this important science among us.

In this country we feel assured that the laws which regulate Profits, Wages and Rent can be more successfully investigated than in the old world. The mind is naturally prone to argue from the fact to the right, and this tendency has shown itself, in a remarkable manner, in all the systems framed by European Economists. True theory in investigations of this nature is founded on a comprehensive examination of phenomena as they are presented in a natural state of the social system. It is reasonable to suppose, therefore, that a country whose institutions and laws have done less to derange the natural order of things than where a vicious social organization has resulted either from military violence or a selfish*

* *This remark is made by Mr. SAY in the Introduction to his Treatise on Political Economy.*

policy, will present the fairest field for analysis and speculation into the causes of wealth. The results of such analysis should constitute the principles for the guidance of the statesmen of the new world. Systems framed by philosophers who have no influence in public affairs, generally perish with their authors ; those devised by what are called practical statesmen survive in the policy of countries long after the names of their framers have been forgotten or have been consigned to oblivion. The Economical theory led to some important changes of public policy to the benefit of the agriculture and internal trade of France ; but the theory being only partially true, soon perished. The Mercantile system, as it has been called, originating in the interested views of merchants and manufacturers, is likely long to influence the counsels of statesmen to the injury of the interests of mankind. Founded on the selfish and contracted principle, that the gain of one country in trade is the loss of some other, it is not only less just in its origin, but far less beneficent in its practical results than would have followed from the adoption of that of the Economists. It follows that we ought not to be implicitly guided by the results of investigations pursued by European writers into the sources of wealth without an examination of the circumstances on which their systems have been framed.

INTRODUCTION.

ALL theories of Political Economy that do not admit the agency of Nature concurrently with the labour and ingenuity of Man in the creation of value must necessarily lead to erroneous conclusions. When we speak of the agency of Nature in production, we mean to use the expression in its most comprehensive signification. The processes of fermentation and decomposition carried on beneath the surface of the earth, aid the labours of the husbandman as effectually as the wind, the water and the elasticity of steam do those of the mariner, or as fire and the various properties of the atmosphere do those of the manufacturer. The resources of chemistry and mechanical philosophy enable man hourly to multiply his enjoyments by enlarging his dominion over nature. Every new modification of matter that fits or prepares it for consumption, is a fresh instance of the improvement of either skill or science in their connexion with

the arts that minister to our wants or our enjoyments. In this respect there is no difference between Agriculture, Commerce and Manufactures. A new manure that increases the productive powers of the soil consists merely in a better combination of the properties or elementary parts of matter, according to an improved understanding of the laws of nature or her agency in production. In this view the earth itself, independently of the manure employed upon it, is a powerful natural agent, which assists the labours of the cultivator equally with the air, the rain and the sun. The balance of profit or advantage between different employments depends on the admission of the principle that Nature concurs with Man in each of the arts of life, either conferring or giving additional value to objects of use and exchange. The Economists inferred that as Landlords throughout Europe derived a large share of the produce of the soil, in the form of rent, that rent constituted a net surplus, after the costs of cultivation were defrayed, peculiar to Agriculture. The conclusion was natural and easy from these premises, that this employment was more productive and profitable than either Commerce or Manufactures. The Economists went, however, further. They insisted that Agriculture was the *only* profitable employment, thus allowing an influence to the productive powers of Nature in giving value to the produce of the land which is denied to her agency in the fashioning of that produce for the uses of society,

and transporting it from where it is wanted less to where it is wanted more.

It is remarkable that Dr. SMITH, after employing a large portion of his valuable work in refuting the theory of the Economists, should have arrived at nearly the same conclusion. He never could have given the preference to the cultivation of the land as the source of higher relative profit unless the agency of Nature in Commerce and Manufactures had been overlooked by him. The ingenious founder of the new school has adopted an error the reverse of Dr. SMITH's. Whilst the latter attributed nothing to the agency of Nature in Manufactures and Commerce, Mr. RICARDO leads the mind, by his reasoning, to the irresistible inference that she does nothing for man, aided by his science and skill, in Agriculture. The system of the latter conducts us finally, therefore, to the conclusion that Commerce and Manufactures are more beneficial employments than the cultivation of the land. It was natural in this system that labour should have had a disproportionate influence attributed to it in the formation of value. It is not quite so evident, however, why it should have been made the *only* element, and, as a consequence, the regulator of value. There is no period of society in which capital does not constitute one of its ingredients. The materials of the weapons of the savage possess value in their rude state, however small, and which do not cease to be a component part of the value which the

weapon acquires after being fashioned for the purposes intended. Nor is it different after capital has been accumulated in every variety of form for the uses of civilized society. It is under all shapes, merely another name for those natural substances, which as soon as they are appropriated, and there is a demand for them, become of value, and receive an increase of value with every new modification they undergo from the combined action of labour and natural agents on them. The notion, therefore, that capital is nothing but accumulated labour, is as erroneous as the idea that labour is the sole element and only regulator of value ; or, that the agency of Nature does not add to *value in exchange*, which, in fact, is what Mr. RICARDO has positively asserted.* Natural agents *in themselves* possess only *value in use* ; they cannot be appropriated, but *possession* alone cannot confer exchangeable value on any object whatever. Natural agents possess the power of *adding to* value, and no more can be said of either labour or capital until there is a demand for them. Of what value would be the industry of man if the substances it is instrumental in modifying, with the assistance of Nature, for the purposes of society, could not be exchanged for other objects which have undergone a similar modification ? Of what value would land as well as labour be, if there was no market for the produce they created ? Natural agents,

* *Principles of Political Economy and Taxation*, first American Edition, chap. 1^o, p. 293.

and natural substances, which take the name of capital, are, therefore, as much as labour among the elements of value, and every system of Political Economy that omits either of these constituents must be imperfect.

Mr. RICARDO, thus setting out from the principle, that labour is the sole element and regulator of value, and taking for granted that the level of profit between Agriculture and other employments is still maintained, notwithstanding the increase of expense in raising raw produce, was bound to conclude, *assuming population at the same time to augment*, that there was a proportional advance in the price of the products of the land, which made an addition to Rent. Such a system leads to theoretical results, precisely similar to what occurs in fact, from laws which confer advantages on some classes of society to the injury of other classes. Thus, when labour is made the sole constituent and regulator of value, it is impossible to avoid the conclusion that, as a greater quantity of it, or which is the same thing, an increased sum in wages, is made necessary to an augmentation of raw produce, which leads, finally, to an advance of rent, the balance of advantage must be on the side of Agriculture compared with other employments. Rent will, on such a system, be higher than it ought naturally to be, and every addition made to it, must be at the expense of the other classes of society. Now, exactly the same result is produced when some advantage is given by law to one portion of the community at the expense

of some other portion, which must destroy the equality of benefit between different employments.

On this theory it is then assumed, that profits will continue on a level, on the supposition that a given quantity of capital employed in Agriculture *necessarily* yields a smaller return of produce, or its value, than the same quantity if employed in either Commerce or Manufactures, or, what is equivalent to this assertion, that, from a *Law of Nature*, raw products are raised at a greater comparative expense than is necessary to fabricate manufactured produce. The rate of Agricultural profit must, then, on this system, *regulate* the rate of profit in both Commerce and Manufactures. But it is impossible, if this doctrine be admitted with all its consequences, to avoid the following results:—

First, That Agriculture, including the amount which the Landlord is supposed on this system to receive, is the most beneficial of all employments.

Secondly, That Rent must absorb the gains of the Capitalist, beyond a certain amount, as fast as they are made; and thus limit the increase of both wages and profits; and

Thirdly, That population must come to a stop, and capital cease to accumulate at no very distant period.

It is impossible, however, to admit that profits will *continue on a level*, on the supposition that raw produce is, *from the nature of things*, raised at a comparatively greater expense than that which is manufactured, *whilst the population at the same time increases*.

If we suppose population to come to a stop, profits will fall to a level; but if the condition of an increase of population be an additional expense in raising food to support it, without a proportionate return in its quantity, the level of profit between different employments is necessarily destroyed. There will, on such a supposition, be a lower rate of profit in Agriculture than in Commerce and Manufactures. This is however precisely the same result as that to which the mercantile system in fact led. It encouraged by law, Manufactures and Commerce to the injury of Agriculture, and by the inequality of profit between the two former employments and the latter, prevented the formation of capital on the land. The new theory would seem therefore to be the revival in part of that system in another form.

Mr. RICARDO, pursuing this new theory to one of its more immediate results, has been induced to say, that as raw produce is raised with increased difficulty, and the food of the labourer rises, more must be expended on wages, and that this increase of wages is a deduction from profit.* The same principle has compelled him to assert, also, that there is no advantage to a state from a large population,† for if wages encroach on profits as the necessity increases of cultivating inferior soils, or, if what is gained by the labourer is lost to the capitalist, and *vice versa*, the labouring classes can

* *Principles of Political Economy and Taxation*, chap. 5, p. 86.

† *Idem*, chap. 24, pp. 374, 375.

contribute nothing to the real wealth of society—they merely replace the necessary expenses of their maintenance. On such a supposition, the support of a large population, if a smaller will produce as great a value in amount, must be at the expense of the net revenue of all other classes except labourers, and the aggregate riches of society will remain without either increase or diminution. But in thus assuming that the labouring classes do not reproduce a greater value than they consume, the radical error of the Economists, which vitiated their whole system, is revived.* Or taking for granted that there is the same amount of productive power with a smaller as with a larger number of producers, it follows that production is not co-extensive with consumption, and the natural balance between them is thence destroyed.

It is from the same principle that saving in expenditure is made identical in its effects with an increase of productive power on the riches of society,† thus confounding the increase of individual with that of general wealth.

It flows from the same principle that capital is said by Mr. RICARDO to augment as well from increased revenue as diminished expenditure,‡ meaning by increased revenue, not that addition to profit derived from enlarged powers of production, but that which is gained from the rise in the price of one or more commodities,

* The Economists made an exception, however, with regard to Agricultural labours.

† *Principles of Political Economy and Taxation*, chap. 6, p. 111.

‡ *Idem*, chap. 6, pp. 110, 111.

which must be attended by a proportionate fall in others, thus again neglecting to distinguish a partial from a general increase of wealth, or making the benefit of one class of society to the correspondent injury of some other, the criterion of a general augmentation of riches. What is this but alleging that that which is true under some circumstances only, is true under all, making *price* and *value in exchange* identical at all times, when, in fact, they are so only when some derangement has occurred in the due proportion between demand and supply. Thus if they are examined, in almost every one of the series of deductions drawn by Mr. RICARDO, will be seen the influence of the principle that labour is the sole constituent and regulator of value.

Mr. MALTHUS, in his last work entitled “Principles of Political Economy,” sets out from the identical principle of Rent from which Mr. RICARDO has deduced this series of results, and arrives nearly at the same ultimate conclusion, but by a different process. He also omits all consideration of the influence of skill and science in turning the powers of Nature to a more productive account in Agriculture, or, in other words, in augmenting the quantity of raw produce with a proportionally smaller expense; and he infers a fall of profit also, but from a totally different cause to that assigned by Mr. RICARDO for this effect. It is the *increase of capital* and not *difficulty of production* to which Mr. MALTHUS attributes the fall of profit. It

was natural, on the supposition that the competition of capitalists reduces the rate of profit, that Mr. MALTHUS should dread the too rapid accumulation of capital, more especially from the effects he had witnessed for the last forty years in Great Britain of an increase in the powers of production apparently too great for consumption. Dr. SMITH, the author of this principle, that competition influences the rate of profit, did not draw any such inference from it; for the increase in his day of productive power was much more gradual; whilst Mr. RICARDO, by allowing more than full effect to the opposite principle, seems to have had an apprehension that finally it would become too strong for the principle of improvement. Thus it has happened that economy in expenditure, or rather the privation of enjoyment, is made necessary to the accumulation of wealth in the system of Mr. RICARDO, whilst Mr. MALTHUS is the advocate of expenditure, and seems afraid that production will so far outrun consumption that the world will have more wealth than it can well employ. It is for this reason that a body of unproductive consumers is said by him to be necessary to a state.*

* How could Mr. MALTHUS contend, as he has done, in his last work, for the necessity of unproductive consumers to maintain the balance between produce and consumption, when the effect of every increase of unproductive consumption is to destroy such balance. How could he say that the augmentation of wealth rests upon the proper distribution of produce, and at the same time contend that such augmentation also depends on maintaining a body of unproductive consumers? effects absolutely incompatible. The discussions which

Thus, however widely they may diverge in their conclusions, are the two leading Economists of the age agreed in the primary principle of the new theory of Rent, to wit, that the necessity of resorting to inferior soils to raise the additional food to support an increasing population, is attended with an augmentation of expense without a proportionate return in the quantity of agricultural produce. We have endeavoured to show that this principle is deduced from overlooking the effect of science and skill in procuring the more effectual co-operation of Nature in Agriculture as in Commerce and Manufactures.

It is true that the cultivation of soils naturally very inferior may be forced, and the additional produce raised at such an increased expense as by augmenting its price must elevate Rent; but this is not *necessarily* followed by a less return compared with the expendi-

have, in fact, taken place as to the proper limit to individual expenditure and accumulation, can never lead to any practical result, if they have not been idle. The self interest of individuals fixes the limit here as in every other case where the arrangements of society do not interfere to disturb the regular action of this principle and weaken its natural influence. These arrangements give sometimes too great a stimulus to the wish or propensity to spend in individuals, and by generating habits of extravagance, which sometimes endure for a considerable period, destroy the natural balance between production in the gross and expenditure. If Economists would confine themselves to an inquiry into the causes which produce this disturbance, they would confer a greater value on their labours in this branch of the science, than by discussing the question in the abstract, whether accumulation or expenditure contributes most to the increase of the wealth of society. Among those circumstances which give too great a stimulus to individual consumption, it will be found perhaps, that the paper system has been the most efficient and universal

ture. An unusual stimulus applied to the land, combined with restrictions on the foreign trade in corn, may produce effects very similar on Rent to what follows in a more natural and wholesome state of things. It therefore does not result that in any instance of a resort to naturally inferior soils, to support an additional population, the increased food can be obtained in no other way than by an increased expenditure without a proportionate return. But in the regular progress of wealth and population there is always room for the employment of fresh capital on the land with increasing profit, because with every addition to the quantity and consequent fall of the price of produce, whether rude or manufactured, the demand for it is extended. The increased return is the fund which pays not only increased profit, but increased wages.

Is it not evident, unless this view be admitted, that a near limit, as we have before remarked, must be placed to the increase of both capital and population? for if land of a still decreasing fertility, which lessens the proportional quantity of food produced, is successively taken into cultivation, as profits will be reduced with every step in this progress, the funds for the maintenance of labour must be diminished in proportion. The increase of population and consequent augmented demand for food are, therefore, evidently *assumed* in this theory. Its authors were compelled to raise up the additional population to give the in-

creased price of raw produce, as a motive to extend cultivation to inferior soils.

Thus we cannot but perceive that on every additional outlay the returns of capital laid out on the land must be augmented, if the skill and ingenuity of cultivators with the resources of science are sufficient to overcome the failing powers of the soil.* The proof that they are so is to be found in the augmentation of population whilst fresh capital is continually applied to the land. During the continuance of the last general war in Europe, the quantity of inferior land taken into cultivation in Great Britain was very great, and the effect on profits must have been disastrous, according to the new theory, unless it had been counteracted

* It is the constant end of improvements in the science and art of Agriculture to equalize the relative disadvantages of different soils and situations. The resources of Agricultural Chemistry have not yet afforded the principles by which this can be completely effected; but who is able to say that a more perfect analysis may not instruct us in the mode by which the processes of Nature may be more completely imitated? Who can place the limit to discovery and skill in this branch of Art any more than to improvements in Mechanical Philosophy and the application of its inventions, in other departments of industry, to the multiplication of the conveniences and enjoyments of life? Can any one pronounce that fallows may not be superseded by a more economical and less tedious method? or that a more complete knowledge of the Laws of Chemistry in their operation on soils, may not enable us so to combine the properties of matter, in the preparation of manures, as to save the necessity of alternate crops? If this should be finally established, what a splendid triumph would be afforded to the science of Agriculture? In the application of the proper methods of irrigation and draining, according to the diversity of soils and situations, what a vast field is yet open to improvement! Not to speak of the Machinery used on the land, that may enable the Agriculturist to increase the quantity of his produce at a much smaller comparative expense.

by an opposite principle of superior efficacy. This principle was, of course, as we have already remarked, the improvements in Agriculture, which prevented the fall of profits. The population went on increasing, and was supported by a constantly increasing fund, to wit, constantly increasing revenue. But it is necessary to subject this new theory of Rent to a more detailed examination.

NOTES

ON

POLITICAL ECONOMY.

CHAPTER I.

RENT.

THE rent of land has been variously defined by Mr. RICARDO in different parts of his work on the Principles of Political Economy and Taxation. It is defined, first, to be "that portion of the produce of the earth, which is paid to the Landlord for the use of the original and indestructible powers of the soil."* Rent, according to this definition, is made to depend on *natural* fertility. But the definition given of Rent by Mr. MALTHUS, to wit, that "excess of price above the costs of production at which raw produce sells in the market," is sanctioned by Mr. RICARDO.† This definition is, however, essentially different from the other, and confounds that Rent "which is paid for the use of the original and indestructible powers of

* *Principles of Political Economy and Taxation.* chap. 2, p. 35.

† *Idem.* chap. 29, p. 423.

the soil," with that paid in consequence of the advance in the price of raw produce from restrictions on the trade in corn, and the monopoly which in some countries is connected with the possession of land.

The *origin* of rent is described in the following manner by Mr. RICARDO. "It is then only because land is of different qualities with respect to its productive powers, and because in the progress of population, land, of an inferior quality, or less advantageously situated, is called into cultivation, that Rent is *ever* paid for the use of it."* Rent is accounted for in this description from *relative* fertility. But relative fertility, in this theory, not only *accounts* for rent, or is meant to be descriptive of its *origin*,† but its *progress* and *amount* are made to depend on the same

* Principles of Political Economy and Taxation, chap 2, p. 38.

† Mr. MALTHUS defines rent as we have stated above (vide Principles of Political Economy, considered with a view to their practical application, chap 3, p. 106) to be "the excess of price above the costs at which raw produce sells in the market;" but his reasonings on this subject mainly refer to the other definition given by Mr. RICARDO, although not formally stated, to wit, the *absolute* fertility of land. Mr. MALTHUS' statement of the *origin* of rent is, however, less consistent than that given by Mr. RICARDO, as he accounts for it from both *absolute and relative* fertility. "The causes (he observes, chap. 3, p. 110) of the excess of price of raw produce above the costs of production, may be stated to the three—

"First, and mainly, that quality of the earth, by which it can be made to yield a greater portion of the necessaries of life than is required for the maintenance of the persons employed on the land.

"Secondly, that quality peculiar to the necessaries of life of being able, when properly distributed, to create their own demand, or to raise up a number of demanders in proportion to the quantity of necessaries produced.

"And, thirdly, the *comparative* scarcity of fertile land, either natural or artificial."

Now, it is obvious, on the least attention to this statement, that the first cause accounts for rent from *absolute* fertility, and the third cause from *relative* fertility—in other words, rent is made to depend upon both *difficulty* and *facility* of production—on both *abundance* and *scarcity*. Mr. MALTHUS' reasonings however are, as we have before remarked, founded *principally* on the *absolute* or *positive* fertility of land, but in part also, on its *relative* fertility, whilst Mr. RICARDO's are *exclusively* based on the latter.

circumstance. Rent, according to Mr. RICARDO, never begins on the first quality of land until the second quality is taken into cultivation, and rent never rises until the third quality is cultivated; it then commences on the second and rises on the first quality. Now *relative* fertility can only account for the *inequality* of rent, it can neither explain its *origin* nor its *increase*. If rent be "that portion of the produce which is paid for the use of the original and indestructible powers of the soil," its amount must be in proportion to those powers, and can be increased only as they increase, or diminished as they diminish. But when inferior land is taken into cultivation, those powers are not altered—they remain as to absolute fertility as they originally were. If the productive powers of the land are increased, this is owing to acquired fertility—to the additional productiveness of the soil from the skill, capital and ingenuity of the cultivators. The "original and indestructible powers of the soil," as they do not admit of diminution, cannot admit of increase. Land of *different* degrees of fertility will yield *different* rents. Relative fertility will therefore account for *relative* rent, and nothing more.

It is the opinion of Mr. RICARDO that "it is when inferior lands are required to feed an augmenting population, that both the landlord's *share* of the whole produce, and the *value* he receives progressively increase."* Now we would ask what is to entitle the landlord to an *increased share* of the whole produce, if an increase of the whole has been effected by the skill and capital of the cultivators? If the landlord has furnished any of the capital by which this increase has been obtained, his share will be in proportion to his investment—if he

* *Principles of Political Economy and Taxation*, chap. 29, p. 424.

gets a greater share, it will be a transfer of a portion of that to which the farmers are entitled from *their* capital and skill. As extended cultivation, therefore, if it has been effected by cultivators without any aid from landlords, is the result of their own improvements, the *whole* of the increased produce arising from this extension of cultivation, is their exclusive property. There can, therefore, of *right*, be no increase of rent from the increased quantity of produce. If the soil has been exhausted by the farmer, he must place it in the situation, as to productive power, in which he found it, or allow the landlord such a sum as will compensate him for the degree of exhaustion which it has undergone. This, therefore, can make no difference in the amount of rent derived from land in proportion to its natural fertility.

Nor can the landlord *in fact* obtain an increase of rent from an increased quantity of raw produce, under any circumstances whatever, *in addition* to its increased *value or price*. The landlord obtains in all cases a rent in proportion to the price at which raw produce sells in the market*—that price depends again on the proportion between the demand and the supply of such produce; but to say that the price or value of any commodity has increased, is precisely equivalent to one or the other of the following assertions: First, that the quantity which the consumer is able to command of such commodity, for the same money amount, is diminished; or, secondly, that the quantity which he is able to command, for a larger amount of money,

* When it is said that rent depends upon the price at which raw produce sells, it is not meant to refer to very short periods, but to that state of the demand and supply which affects the price of landed products during the currency of a lease—one or two bad harvests, or a temporary increase of the demand, can have no effect on rent.

is the same. In the first case there is a diminution of supply—in the second case an increase of demand. If the demand for raw produce has augmented, without an increase of the supply in an equal degree, the landlord will receive a larger proportional money amount than before, or, in other words, the consumer will receive the same quantity of raw produce for a greater amount of money ; or, if the supply of such produce has diminished, without a correspondent increase of the demand, the landlord will also, in this case, receive a larger proportional amount of money than before, or, which is the same thing, the consumer will receive a smaller quantity of such produce for the same amount of money. When Mr. RICARDO, therefore, speaks of an increased *quantity* of raw produce falling to the share of the landlord, *in addition* to its increased *price* or *value*, and of the landlord being in consequence *doubly benefitted* by difficulty of production, the idea is inconceivable. The *money rent* of the landlord is of course plainly distinguishable from his *corn rent*—but they must, under all circumstances, rise and fall in an inverse ratio. His *money rent* is governed by the proportion which the demand bears to the supply of raw produce—so also is his *corn rent*. A part of what he gains in the one way he loses in the other. Rent is therefore never in proportion to the greater or less difficulty of production—that is, it does not increase from a Law of Nature as the quantity of food diminishes, and diminish as the quantity of food increases: but is governed in its amount by those circumstances that keep the market, for any length of time, understocked with the produce of the land. There can then be no increase of rent from an increased *quantity* of raw produce in addition to its

increased *price*, in any state of things; nor can the landlord acquire any such increase of rent from an additional price of raw produce, connected with the "original and indestructible powers of the soil," for, as under all circumstances, these powers remain the same, the landlord can never derive any addition to his rent for the use of these powers.

We are now led to consider *in what manner* the increased *value* of produce leads, in the new system, to an increase of rent. Mr. RICARDO has this passage. "In speaking of the rent of the landlord, we have rather considered it as the proportion of the whole produce, without any reference to its *exchangeable value*; but since the same cause, the difficulty of production, *raises* the *exchangeable value* of raw produce, and raises also the *proportion* of raw produce paid to the landlord for rent, it is obvious that the landlord is *doubly benefitted* by difficulty of production. First, he obtains a *greater share*, and, secondly, the commodity in which he is paid is of *greater value*."^{*} The new theory teaches besides, that the whole of the increased price of raw produce raised on the worst land goes to the cultivator to defray the additional expenses of cultivation, and the whole of the increased price of that raised on the best land, to the landlord in the form of additional rent. The increased price, however, cannot take place under the circumstances supposed. It is founded on an *assumption*, as we have already remarked, of an increased demand and an increased population—it is taken for *granted* that population is augmenting whilst capital is diminishing. The additional price cannot therefore be *given*. The authors of the new theory of rent have in fact involved themselves in inconsistency. They make the rise

^{*} *Principles of Political Economy and Taxation*, chap. 2, p. 54.

of raw produce to *follow* from difficulty of production, and yet they state that the demand for additional produce *precedes*, as it must, the cultivation of inferior land, which is, in fact, saying that the increase of price is both *cause* and *effect*. The price of raw produce rises, say they, *because* the cost of obtaining an additional quantity is increased, and yet this additional quantity is produced *in consequence* of the demand augmenting and the price rising. This is making the increase of the price the effect of additional demand, and, also, the effect of additional expenditure.

How then, it may be asked, can that increase in the price of raw produce which obviously goes to augment rent be accounted for? The excess of the price of the products of the land caused by monopoly, above that price for which they might be obtained if the monopoly did not exist, is the source of increase of rent. The augmentation of rent arises, under all circumstances, from whatever cause prevents the supply of food from being proportioned to the demand. Deficient harvests, as they are accidental in their occurrence, and their effects well known, need not be taken into view. Every other limitation of the supply of raw produce is either immediately or remotely connected with monopoly. Perhaps the term monopoly is not strictly accurate in the sense we employ it,* but,

* There are various senses in which this term is employed. It is most frequently used with the meaning I have just attributed to it, but surely it does not convey the same idea, in this sense, as when it is meant to be descriptive of what is called *natural* monopoly, or that scarcity arising from a limited quantity of peculiar products in the market, as in the case of certain wines, the produce only of particular soils. This species of monopoly *does* result from a *law of nature*: but the monopoly connected with rent arises out of certain *social arrangements*. In this case what is gained by one class of the community, which these arrangements favour, is lost to another class—in the instance of rent, what is gained by landlords is lost to the rest of the society.

as it has always been used to express that state of things by which room is not permitted for the full influence and effect of competition, we have adopted it as the most convenient for our purpose. It is agreeable to every principle of supply and demand to conclude that as land is locked up in the hands of large proprietors, rents and raw produce should proportionally advance.

The original division of land, and the state of law consequent on that division, have a most important influence on rents, profits and wages. If the sovereign (as is the case in some of the Eastern Monarchies) should be the sole proprietor of the soil, and exact an undue portion of its produce as rent, it is in *principle* the same as the appropriation of land in large portions by an aristocracy who have fenced their possessions and prevented their free alienation by the barriers of law. If land cannot be brought freely into market for sale or mortgage, it will not be pretended that it will sell or rent at a competition price, or that price which is in proportion to its natural fertility. This is the true criterion of the real value of rent. All that is obtained as rent, (in the absence of commercial restrictions,) above the power of land in a natural state, to yield the necessaries of life, is attributable to the peculiarity of its division, and to the laws by which its alienation by devise or its transfer by purchase is clogged.

If we suppose on the settlement of a new country that land is of easy acquisition, and that division prevails which is most conducive to the increase of capital and population, in such a case land being obtainable at the price of free competition, its rent can never exceed its productive powers derived from nature. This is

on the supposition that capital and population are in due proportion, and that no obstacles exist to a free commercial intercourse with other countries. If land, under these circumstances, is purchased to hire, its rent must continue invariable in amount, and must be governed by the same law which regulates the interest on a loan of capital to be employed productively by the borrower. The amount of rent can never vary—can never increase nor diminish, because the natural fertility of the land—its “original and indestructible powers,” are always supposed to be the same. It is the use of these powers for which rent is paid, and whatever value the proprietor sets on them, or what they have cost him, must determine, on the principle of an ordinary loan, the amount of value annually paid for their use—in other words, the amount of rent. The price of food raised on such land, the price of the land itself, and its rent, will all be at fair competition rates—which we may call the natural price and rent of land.

Let us now suppose the settlement of a country where the land is appropriated by persons who become the proprietors of large tracts. Let us further suppose that its alienation is prevented, on the demise of the owners, by the law of descent—that its transfer by mortgage and sale is trammelled from the difficulty of ascertaining title, and by the complexity of the forms by which its transmission is regulated. The value of land, in such a state of things, must be higher than where, as in the other case, it can be brought into market without restrictions on its transfer or alienation. A relatively higher price of land, a relatively higher rent, and relatively higher price of raw produce, must be the consequences. All that portion

of price and rent obtained above what would have been obtained if land had been subject in its rent and price to the principle of unrestrained competition, may be denominated monopoly rent and monopoly price, in contradistinction to natural price and natural rent.

The price and rent of land, in such circumstances, are prevented from falling as low as they would fall if the competition of proprietors to sell or landlords to hire was as great as the competition of capitalists to purchase and of farmers to lease. If we pursue this parallel, and suppose these countries to have equal taxation, equal natural fertility of soil, and equal improvements in agriculture, the excess of the price of raw produce, in the country subject to the disadvantages mentioned, above the price at which it could be imported would exactly measure the extent of the monopoly, and it would be undersold in its own markets by the country more favourably circumstanced. In such a case, unless a duty were laid on the imported corn in proportion to the difference of the price, the whole supply must come from abroad, and no land could be cultivated in the country suffering under this species of monopoly, however fertile and convenient to market. This case is put on the supposition that there are no duties, or equal ones, laid on the raw produce of either country by the other. It follows that the consumers of corn in the country whose land is tied up by the law of descent, and its transfer clogged by legal forms, must pay a higher price for food than the consumers of corn in the country which permits land to come freely into market for sale or rent. The saving which the labourer would have made in that part of his wages applied to the purchase of food, and those articles of his consumption of

which raw produce forms a part, is prevented; the addition which the capitalist would have made to his revenue by a similar saving, is also prevented. In this view it is that an increase of rent, arising from a higher price of food than would have existed under a different state of things, is a transfer from profits and wages to rent. If those to whom the profits and wages rightfully belong, were permitted to derive the whole benefit of their skill and exertions, it would form a stimulus to the further increase of capital and population, or it would enable the existing population to subsist in greater comfort. Being spent as revenue and unproductively, it prevents as rapid an increase in national wealth as prevails in countries where the whole of the difference between the costs of cultivation and the price at which raw produce sells, is divided between the labourer and capitalist, allowing the rent of land, in its natural state, as among these costs. If, in addition to this cause of the higher price of food, is added restrictions on the trade in corn, the effect is the same in *kind*, and only different in *degree*. It is an aggravation of the evil from an extension of the monopoly. These restrictions may be temporary, but the faulty or unequal division of land, and the institutions to which it gives rise, to preserve the influence of a landed aristocracy, may endure for centuries. As long as such a state of things exists, the price of landed products is prevented from falling to that level which unlimited competition would effect. The inferences from this review are these—

First, that the rent of land has its *origin* in natural fertility, or those “original and indestructible powers of the soil” by which it is made to yield a surplus

above the profits of the capital and the wages of the labour employed in its cultivation:

Secondly, that the *increase* of rent is owing to those circumstances which limit the supply of raw produce, either from restrictions on commercial intercourse, or from a faulty division of the land and the laws by which its free transfer and alienation are prevented, or from both circumstances united:

Thirdly, that no increase in the *quantity* of raw products can augment rent, and that no increase in the *price* of those products, which in fact goes to augment rent, can take place unless the supply is prevented from being proportioned to the demand.

The *commencement* of rent, according to the new doctrine, is delayed until land of a decreasing fertility is taken into cultivation. The best land and the worst are put on the same level in this respect, until a certain period of time has elapsed. But rent, pursuant to one of Mr. RICARDO's definitions, (being "for the use of the original and indestructible powers of the soil,") should commence as soon as those powers are made available for the purposes of cultivation. It should, consistently with this definition, have its beginning from the moment those powers are brought into profitable use. Suppose land on the first settlement of a country purchased as an investment, the proprietor preferring hiring to cultivating it, will not rent be derived from the instant it can be made to yield a sufficient quantity of produce to pay rent in addition to wages and profits? The authors of the new theory would not contend that the cultivation by the proprietor himself would make any difference in this respect. If he prefers to cultivate rather than to hire, he must receive an interest on his capital, which is only an-

other name for rent. He must obtain such a quantity of produce, or its value, as will pay him an annual sum in the ratio of his investment, in addition to what he derives, as cultivator, for profit.

Mr. RICARDO lays much stress on the circumstance that, in new countries, land is abundant and cheap, but it does not follow that because land is abundant that it can be obtained for nothing. No one, says he, "would pay for the use of land when there was an abundant quantity not yet appropriated, and therefore at the disposal of whosoever might choose to cultivate it."* This is, however, assuming what does not exist; it is taking for granted that land is not generally appropriated where it is most fertile and abundant, and that any cultivator who chooses may convert it to his benefit without paying any thing for its use. "On the common principles of supply and demand," says he again, "no rent could be paid for such land, (he is speaking of the fertile land of a new country,) for the reason stated why nothing is given for the use of air and water, or for any other of the gifts of Nature, which exist in boundless quantity."† Now it is not true that land exists any where in such boundless quantity as to be without price or value when available for profit to a cultivator; nor is it correct to compare land to air and water, which, in themselves, have a value in *use*, but no value in *exchange*. Land is capable of appropriation—air and water are not. Land, from its abundance, may be of *little* value, and some land, on account of its distance from markets, may lie waste from the want of purchasers or lessees, but the real question is this: when land can be made

* Principles of Political Economy and Taxation, chap. 2, p. 37.

† Idem. chap. 2, p. 37.

to yield more than the ordinary profits of stock and wages of labour, will any one be suffered to appropriate or occupy it without price or rent?

It is not presenting the question in its true aspect, therefore, to consider land without reference to *demand*. Mere *quantity* without *demand*, can determine nothing in relation to *exchangeable value*. The worst lands of an old country, or the best lands of a new one, may remain on the same footing as to value. The great distance of the most fertile tracts from markets, may produce the absorption of the whole price of their products in the costs of transportation, as the sterility of a portion of the territory of an old country may prevent such returns as will pay the costs of cultivation. The demand and the price may, however, increase so as to permit the cultivation, with both profit to the cultivator and rent to the landlord, of land too far distant from markets or too sterile to be cultivated under ordinary circumstances. If the demand for and the price of raw produce should augment to this extent, land which before could command neither purchaser nor lessee, will yield some rent to the landlord, otherwise, if cultivated the addition to the price will go into the pockets of the cultivators and disturb the level of profit between agriculture and other employments. If the price of necessaries is forced up by a high stimulus to population, and difficulties are thrown in the way of importation, land, which in ordinary circumstances might lie waste, would pay nothing, after cultivation, for original or natural fertility. Its power of paying rent has its origin in a forced state of things. It is the effect of the application of excessive stimuli, which, when withdrawn, will throw the land which has felt its influ-

ence again out of cultivation. It would appear, therefore, that, under all circumstances imaginable, whenever or wherever land is cultivated, whether it be more or less fertile, near or distant to markets, it pays rent, and it seems neither agreeable to fact nor just theory, to say that rent does not commence before the natural power of the soil to produce food begins to diminish.

It is not a little singular that the discrepancy between this opinion and the definition given of rent by Mr. RICARDO did not occur to him. He considers the fertility of the land the foundation of rent, for it is "that portion of the produce of the earth which is paid to the landlord for the use of the original and indestructible powers of the soil." Yet the new theory teaches that when the productiveness of these powers begins to lessen, that rent commences and increases with every step in the descending scale of fertility. Mr. MALTHUS has strongly insisted on the advantages of *absolute* or *natural* fertility. He considers it as a gift of Heaven to man of the highest value: he views it as the source of the greatest social improvements: he explains it to be the origin, by the relief from labour it affords, of arts, sciences, &c.* yet this great gift is never rendered available until the lapse of a certain period of time; these inestimable powers of the soil are never made to yield that surplus, in the form of rent, which is described as the peculiar attribute of the land above every other natural agent, until they begin to diminish in productive energy—until natural fertility lessens. From the view of the subject we have taken, we consider rent, therefore, to commence from the moment land is taken into cultivation, and that its *amount* will be regulated by the surplus which

* *Principles of Political Economy*, chap. 2, sec. 10. p. 170.

it will yield after the replacement of the capital of the cultivator with the average rate of profits and wages.

In a state of society in which neither taxation, commercial restrictions, nor a vicious division of the land, prevents the labourer and capitalist from receiving as large a share of its produce as they are entitled to from their skill and exertions, rent will never exceed, as I have endeavoured to show, the originally productive powers of the soil. It follows that as population increases and fresh land must be cultivated to raise the additional food required, the rent paid for the use of land of decreasing fertility will be relatively less than that already in cultivation by the difference in its naturally productive power. The rent received for land of this comparative inferiority will then be in proportion to the surplus it can be made to yield, after the deduction of all the expenses of cultivation, including, of course, average profits and wages, as in the instance of the land first cultivated. On every descent made in the scale of fertility, the same principle will apply. Let us adopt the illustration of Mr. RICARDO, although for a different purpose.* Thus, suppose land No. 1, 2 and 3 to yield, with the employment of an equal quantity of capital and labour, 100 90 and 80 quarters of corn respectively, and suppose 60 quarters to be the net return on each quality. The surplus on No. 1, which would constitute rent, would be 40 quarters, on No. 2, 30 quarters, and on No. 3, 20 quarters. These portions would exactly measure the originally productive power of these different qualities of land. Now, as the population increased, so as to make a resort to No. 2 necessary, the increase of skill and science in Agriculture that had taken

* *Principles of Political Economy and Taxation*, chap 2, p. 39.

place, would permit capital to be employed on No. 2, with increased returns. Whether it were employed on No. 2 or No. 1, would make no difference as to profit—the capital applied to No. 2 would be equally productive with that applied to No. 1, with proportionally less rent. No. 2 is resorted to, however, because land is of limited extent, and constant additions to the quantity of raw produce cannot be made on the same surface. No. 2 would not then be cultivated unless it could be made as productive and profitable with the same outlay as No. 1, and unless the landlord consented to receive a relatively less rent than the owner of No. 1, in the ratio of the difference in their productive powers. If improvements in agriculture had not taken place so as to yield as large returns, with an equal amount of capital, on No. 2 as on No. 1, no additional quantity of food could be provided, and population would come to a stop. It is only necessary to extend the same principle to No. 3, and so on. The increase of population, therefore, depends on the extent of the improvements in agriculture, and inferior land is laid down in tillage exactly in proportion as these improvements extend. This is the reverse of the new theory which connects the augmentation of population and produce with the increased difficulty instead of the increased facility of production. This is only an extension, however, of the principle with whose wonderful results in Manufactures we are familiar.

Why should a different law prevail in one of the great departments of production to that which governs in the others? Is it not consonant to the general analogy of Nature to conclude that a provision is made in the skill and inventive powers of man for the

decay, or rather the inequality, of those natural resources which minister to his necessary wants? What evidence is there, that skill, science and ingenuity are not, in all stages in the progress of society, able to overcome that natural inferiority of soil which refuses to yield, without the co-operation of these powerful human aids, an increase of the means of subsistence? The results of skill and science in Manufactures are visible to all—they are embodied in machinery. But in Agriculture they become a part of the soil, or are blended with it and cannot be distinguished from it. We are therefore urging no novel principle in insisting that in Agriculture the inventive powers of producers will be as efficacious from the same causes as in Manufactures. That they will be *equally* efficacious is necessary to the level of profit or to an equality of benefit between Agriculture and other employments.

From the view, then, which I have taken of the subject of rent, it may be supposed that I do not acquiesce in the conclusions drawn by those writers who consider rent, *under all circumstances*, in the nature of a monopoly. The price paid for the hire of land, supposing it cultivated exclusively by the capital of the farmer, or, in other words, the sum given annually for the use of its “original and indestructible powers,” cannot be considered as connected with monopoly of any kind. This is, as I have already remarked, the *natural* rent of land, whether it is cultivated by the proprietor or any other person as lessee. It is almost unnecessary to add that the higher rent, *under any circumstances*, paid to the landlord, is connected, as we have endeavoured to show, with monopoly, either arising out of the possession of land in the manner already described, or with restrictions on the trade in corn.

Mr. MALTHUS insists that rent is not governed by the laws of monopoly under any circumstances whatever. Mr. SISMONDI, in his work *de la Richesse Commerciale*,* views rent under all circumstances as of the character of an ordinary monopoly. Mr. BUCHANAN, in his edition of the *Wealth of Nations*,† entertains the same idea. But this is confounding the rent paid for the “original and indestructible powers of the soil” with that arising from the price at which raw produce sells above what it would bring, if restraints on importation and the monopoly connected with the possession of land in many countries, of which I have already spoken, did not exist. As the former is natural rent, it is governed by the laws which regulate a loan of capital, and not by those which monopolized commodities obey. It does appear singular, as asserted by Mr. MALTHUS, that Mr. RICARDO should, holding the opinions he has expressed, coincide with Mr. SISMONDI and Mr. BUCHANAN in these views on the subject of rent. Surely, if rent, according to Mr. RICARDO, arises out of the *necessity* of resorting to inferior soils, it is the deduction of a fact from a *Law of Nature*. There is, therefore, an evident inconsistency between this idea and the notion of an ordinary monopoly—that which is deduced from a *Law of Nature* cannot possibly partake of the character of monopoly in the sense of this term when Mr. RICARDO considers it as leading to a transfer from profits and wages to rent.

From these principles it appears necessarily to follow that rent must be a component part of price.

* Vol. 1, p. 49.

† Vol. 4, p. 134. These references to the opinions of Mr. SISMONDI and Mr. BUCHANAN are taken from Mr. MALTHUS’ work already quoted.

No land, as I have endeavoured to show, that will yield a quantity of produce above the expenses of cultivation, will be suffered to be cultivated by any one but the proprietor, unless something is paid for its use. The surplus is his property, and no one will be allowed either to appropriate or use it without an equivalent. The payment of this surplus, or of a value equal to it, must be as much one of the conditions of the supply of raw produce as the other expenses of cultivation.

It would then appear from this view, that the argument of those who consider Agriculture the most productive employment, is founded on the misconception that, because land can be made to yield, in certain parts of the world, a high rent, this is additional value or a net surplus peculiar to land.

The large portion of the produce of the soil transferred, in the form of rent, in consequence of the social arrangements that have taken effect throughout Europe, has given rise to the idea of a net surplus peculiar to Agriculture. But we perceive that where more natural arrangements prevail, there is no surplus for rent, in the sense of this term as it is generally understood. The proprietor of land in a new and fertile country, as in the United States for example, if he is the cultivator himself, derives, as we have shown, an amount, in addition to the profit on the capital employed in cultivation, in proportion to his investment in the purchase of the land itself, and we may call this rent or not as we please; yet we would find, if we could make the comparison, that this amount is much less than that received as rent on the same quality of land, all other circumstances being equal, in any part of Europe.

CHAPTER II.

PROFITS AND WAGES.

IT is scarcely possible, nor is it necessary, to separate Profits from Wages in investigating the principles by which their increase and decline are regulated. The laws which they obey are strikingly similar, and they lead to results in the progress of national improvement, nearly identical. In our reasonings concerning wages and profits we must distinguish between what is received in *money amount* from what the amount derived will command either of labour or commodities. Money profit is the quantity of money received by the capitalist as the return from his investment—real profit is the quantity of produce, whether destined for unproductive or productive consumption, for which this money will exchange.

Money wages are the quantity of money received by the labourer for his labour—real wages the quantity of the conveniences and necessaries of life his money wages will command. The *rate* of profit must therefore be in proportion to the difference between the outlay and the returns, not in money, but in what that money will purchase. The *rate* of wages is in

proportion to the difference between the money received by the labourer and what that money will command of the commodities necessary to his subsistence.

In the progress of society money wages fall, in a natural state of things, and real wages rise. Real wages rise, because the price of necessaries falls, and the labourer's command of them is increased. Money wages fall, because the labourer, from the rise of his real wages, is induced to marry and multiply, by which the number of labourers is increased in the market. But real wages will rise in a higher proportion than money wages fall, or the condition of the labourer would not be improved, and he would not be induced to marry and increase.

Money profits do not fall in the progress of society, for although the prices of all commodities decline, their quantity increases in an equal proportion, and the capitalist receives as large a money amount as before the decline. Real profits rise, for they depend on the amount of the returns *in produce* compared with the amount of the expenditure, and as the quantity of productions in the progress of society is multiplied, the real gains of the capitalist must increase.

We thus see how well these principles harmonize with those laid down on the subject of rent and the increase of the produce of the land. There can be no addition, in the first instance, to raw products unless the productive powers of the soil are increased. The additional produce is brought within the reach of a greater number of consumers from the fall of its price. The number of consumers is increased in proportion to the addition made to the means of subsistence, on the principle that as quantity augments, price is re-

duced and consumption enlarged. The labourers, in the ratio of their increase, are compelled to receive less wages, which enables the capitalist, with the same money amount, to employ an additional number of labourers, or an additional quantity of labour, which is the same thing, and which, as we see, has been already provided. Thus is capital made not more instrumental to the increase of population than population to the increase of capital—thus is the ratio of their increase precisely equal. Wages do not encroach on profits nor profits on wages. All that is necessary to the final results is, that science and skill should be able to overcome the difficulty of production on land of a decreasing fertility.

The effect of an augmentation of the quantity of raw produce, from the diminished difficulty of production, must give such a stimulus to population as will reduce money wages. There is the cost of producing labourers as well as the cost of producing the labourer's subsistence. The cost of production with regard to the labourer, is the price of that food and those necessities which are essential to the continuance of the race of labourers, and ensure a sufficient supply of them. And as the consequence of an addition to supply, is a decline in price, money wages must inevitably fall, on the same principle that raw or manufactured products are reduced in price from increased facility of production. But if the cultivator will be able to command an increased quantity of labour, in consequence of a fall in money wages, (labour being the most costly of the instruments of production,) it will further stimulate production on the land, promoted, as it must be, by additional skill and science. Raw produce must again augment in quantity, its

price must again fall, and by enabling the labourers to command more food and necessaries, induce them further to increase, which will again add to the supply of labour in the market. Thus the same series of effects is always recurring and never interrupted but by the folly or selfishness of those who are entrusted with power.

The reader will not fail to see the importance of the principle, that the reduction of money wages enables the capitalist to command an increased quantity of labour for the same money amount, or the same quantity for a smaller money amount. His interest will prompt him to increase the number of his labourers, or every additional fall in the price of his commodity, as it is increased in quantity, extends the demand for it. This principle, so important and necessary to explain the phenomena of production, seems to have been entirely overlooked by the school of Mr. RICARDO, who never view the increased *quantity* of labour necessary to an augmentation of produce in connexion with a fall in its *price*, or conceive the possibility of such a reduction of money wages as will enable the capitalist to employ an additional number of labourers or greater quantity of labour, to obtain an augmentation of produce, without a proportional increase of expenditure.

How much more consonant with what we may suppose the arrangements of Nature thus to infer that population and capital are permitted to increase together. According to the new theory they are alternately checked in their increase, each by the other, at repeated intervals. Profits cannot fall below a certain limit, for the capitalist can have no motive to accumulate, if the accumulation is to be absorbed by wages as soon as made. But the fall of wages has its

limit also. The population must decline if the labourer's wages are so reduced as greatly to lessen his command of the means of subsistence.

The authors of the new theory, perceiving to what results it led, were compelled to place the limit to a fall of profits and wages when the capitalist would have no further motive to accumulate, and the labourer no additional inducement to marry and increase, for, unless this had been conceded, the landlord must have absorbed, in constantly increasing rent, all the profits and all the wages—*à reductio ad absurdum*. What then must be supposed to take place on the new system? Wages rise until they can rise no higher, from the inability of the capitalist to pay any more for labour. They then must begin a retrograde course—they begin to fall, to allow the capitalist the power to increase his capital by an increase of profit, for, on this system, it is as wages fall that profits rise; but as soon as the capitalist's profits are augmented to a certain point, wages will again rise and soon overtake the increase of capital. During the period between the fall and the rise of wages, the condition of the labourer must be miserable, for not only is he made to receive a smaller money amount for his labour, but this sum commands, from the rise of raw produce, fewer of the necessaries and conveniences of life. To such inconsistent results does the new theory lead. This course is retarded but for very short periods by improvements in Agriculture, pursuant to this theory, for it teaches that, by a Law of Nature, raw produce is raised with increased difficulty, or that the costs of cultivation are augmented in the progress of wealth and population without a proportional increase of produce.

“With the progress of society (says Mr. RICARDO) the natural price of labour has always a tendency to rise, because one of the principal commodities by which its price is regulated, has a tendency to become dearer, from the greater difficulty of producing it. As, however, the improvements in Agriculture, the discovery of new markets, whence provisions may be imported, may, *for a time*, counteract the tendency to a rise in the price of necessaries, and may even occasion their natural price to fall, so, also, the same causes produce the correspondent effects on the natural price of labour.”* Again: “The natural price of all commodities, *excepting raw produce and labour*, has a tendency to fall in the progress of wealth and population”†

Mr. MALTHUS also admits the effect of improvements in Agriculture in lowering the price of raw products, but he states the difficulty of production, as the most efficient cause, and capable in the end of overpowering the principle of improvement.‡

But it may be said that the doctrine we have been contending for is contradicted by the state of things that took place in Great Britain during the last general war, when the price of raw produce rose at the same time that both money wages and profits increased. According to the principles we have laid down, the prices of labour and raw produce ought to have fallen if profits advanced. Instead then of there being a reduction of money and a rise of real wages, these fell, or, which is the same thing, the price of raw produce rose, and money wages increased. But in this

* *Principles of Political Economy and Taxation*, chap. 5, p. 67.

† *Idem*, chap. 5, p. 68.

‡ *Principles of Political Economy, &c.* chap. 5, pp. 233, 234.

case, although the effects were reversed, the principle for which we contend is sustained.

It will be recollected that it is the *difference* between real wages and money wages that forms the true reward of labour. This difference may be caused as well by a rise of money wages as by a rise of real wages. If, whilst real wages fall, money wages rise in a higher proportion, a difference is created as well as when these effects are reversed. The causes that produced the advance in the price of labour, in the period and country above referred to, are very obvious. The demand for labour rose faster than the supply could be furnished. The population increased very rapidly, but the demand, for the whole period in question, was in advance of the increase. The war employed unusual numbers of the people, and the effect, in consequence of this circumstance, was that the market, for the entire period of the war, was understocked with labour, which advanced money wages in a higher proportion than it depressed real wages.

But the great reward, or high wages of labour, as well as the high profits of capital, kept up also the price of raw produce, for the labourer and capitalist had an increasing money amount to devote to the purchase of the necessaries of life. The supply of raw products was augmented, but it was not increased in proportion to the additional wants or additional demand of the increasing population. The demand was always therefore in advance of the supply of necessaries, which augmented their price. We see, then, that the price of labour rose instead of falling, and, by increasing the costs of production, must have, apparently, on the principles we have been explaining, proportionally reduced profits. But although that

portion of the cultivator's expense, consisting of wages, increased with the other parts of his outlay, still the quantity of produce obtained far exceeded this increase of expenditure.

It will be recollected that the stimulus to the inventive powers of producers was of an uncommon kind, and that the inducements to improve machinery employed on the land, to save in animal power generally, as well as to increase the productive powers of the soil, from the more skilful use of manures, cannot be judged of from what takes place in ordinary circumstances. The wages of labour, it should also be borne in mind, were prevented from rising to the height they would have reached from the effect of the legal assessment for the relief of the poor. The labourers, from an unnatural competition among themselves, were thence precluded from receiving as large a recompense as they were entitled to, from the increased demand among employers. Wages, therefore, did not rise in an equal ratio to the increase of capital and of work to be done, although the condition of the working classes was universally much improved.

If these opinions be correct, the doctrine of a general glut, (if by this is meant a glut in a particular country,) which has excited so much controversy, must be sustained. A glut of certain commodities is the consequence of production exceeding demand in certain quarters, or of a faulty distribution of capital, and the principle admits of an extension to the whole of the commodities produced by a country, if the productive powers of such country had been previously stimulated in an uncommon degree by an unusual foreign demand. In the instance we have been considering, what occurred? In Great Britain profits fell,

after the cessation of the foreign demand, not in one or a few employments, but in all. Wages fell too universally. Rents fell also, and the whole in the order they had risen—manufacturing and commercial profits and wages first, and agricultural profits and wages last. In the United States, the same effects were also experienced in all employments as the foreign demand ceased. In both countries commodities were produced in excess compared to the demand, and their prices fell because the former demanders supplied again their own wants ; they became, when their habits of industry had been resumed, producers as well as consumers.

It is an admitted doctrine, that if there is excess of commodities and capital in one or more employments, there must be a relative deficiency in others ; but, allowing the accuracy of this principle, it is inapplicable to the cases in view. There was no evidence of the defective or unequal distribution of capital in either country ; and the best proof that a general glut existed in both, was to be found in the fall universally in both, not only of profits but wages.

But if by the expression general glut is meant a glut in all countries, such a consequence is inconceivable. The different states of the great commercial commonwealth are in this view like the different districts of the same country, or like the various employments carried on within it. If from any cause capital or population should be in relative excess in a particular district, it must flow to that or those districts in which there is a relative deficiency, until the equilibrium is restored. If higher relative profits or wages are derived by those who follow certain employments, they will attract capital or labour, in the same manner, until the level is brought about. We have only

to apply the same principle to the different states composing the great commercial republic, and if any circumstance has happened to produce a different distribution of capital between them to what ordinarily prevails, the same effects, on a more extended scale, will follow.

It is true, as Mr. SAY has asserted, that productions are bought finally with productions*—in other words, when no unusual circumstances cause a derangement in the ordinary relations of commerce between countries, there is as much produced on one side as on the other; or in a trade of barter, equal value is given for equal value received. These are the natural arrangements established through the self interest of individuals. But wars, especially if they are general and long protracted, disturb these natural arrangements, and by stimulating excessively on one side, whilst they stop the powers of production on some other, disturb in a more than ordinary degree the natural state of prices between countries.

But the effects will be felt long after the causes of the disturbance have ceased to act. The equilibrium of prices between countries, like that between different districts of the same country, or between different employments carried on within it, must be finally restored, and those countries which have had their powers of production excited in the greatest degree, will have to endure, when the re-action occurs, the longest period of suffering.† In the unnatural state of things which leads to these results, those countries whose powers of production have been suspended, will have no increase

* *Treatise on Political Economy*, chap. 15, p. 87.

† Mr. MALTHUS makes a similar remark. See his *Principles of Political Economy*, p. 387.

of produce to exchange with states, for the time, more favourably circumstanced. As their revenue does not augment, a part of their capital must be encroached upon to supply their necessary wants. The conclusion from this view is, therefore, that the rise in the general rate of profits and wages, in the United States and Great Britain, during the hostilities in Europe, and their subsequent fall, were the effects of an unnatural state of things. The general change on the continent of Europe from the arts of peace to the pursuits of war, and then back again to the occupations of peace, caused so great a derangement in the ordinary relations between prices and demand, that the phenomena were as unlooked for as they were difficult of explanation.

It is necessary then to distinguish between a general rise of profits and wages in a particular country, produced by an excessive stimulus, and that general rise which is the effect of its regular progress in wealth and population, and to distinguish between a fall of the same nature, when the stimulus is withdrawn, from that fall which occurs from circumstances, such as heavy taxes, war expenditure, &c. that impede the acquisition of riches and the augmentation of population.

When the advance or decline of profits and wages is general, all capitalists or labourers gain or lose in an equal proportion. But when the advance or decline takes place in particular employments, it is to the benefit or disadvantage of those who pursue those employments to the loss or gain of others in the society. The equilibrium between these employments and the others will be finally adjusted by the operation of the principle of competition.

The limit to a fall of profits from heavy taxation is not very remote. The rise of profits from increased facility of production is without limit. We have explained the circumstances that determine the *natural* increase in the rate of profit. We have also endeavoured to show that when it increases in a higher ratio, it is the effect of unusual excitement, which must, sooner or later, be succeeded by a re-action and stagnation, which proportionally reduce it. To the point then, of natural increase in their rate, profits always converge, however they may occasionally rise above or fall below it. The principle of competition can have no influence on the progress of either profits or wages, in a natural state of things. Profits and wages advance inevitably in the regular progress of society, as has been shown.

It is not a little singular that Mr. MALTHUS should so much underrate the importance of the principle, that an increase of capital is necessary to provide both employment and maintenance for additional population. If the capitalist regularly augments the difference between his outlay and his returns, he proportionally enlarges the sphere for the employment of the whole of what he saves from his necessary expenditure, not only with undiminished but constantly increasing revenue. The uninterrupted progress of the cotton manufacture of Great Britain during the last forty years, notwithstanding the fall in the price of the goods, affords a striking illustration of this general fact. The accumulation of capital, therefore, which Mr. MALTHUS constantly supposes will be followed by declining profits, may go on to an indefinite extent without any such decline, if room can be found for the employment of the successive additions made to it. That such room

will be found if trade is left unobstructed by restrictions and by wars, I have no doubt. The old channels of commerce are constantly enlarged and others created with every increase of capital, if the inventive powers of producers and the various resources of states are properly developed. The diversity of soil, situation, products and wants, opens sources of mutual and increasing gains to countries whose governments are wise enough to profit by this diversity. There can then be no *assignable limit* to the employment of additional capital, for the experiment of a general and free commercial intercourse between countries has never been fully tried. Where, in fact, can we place the limit to human ingenuity in inventions to increase the powers of production? At what point can we say Nature must fail to supply the variety of objects that enlarges the commercial intercourse between states, and by affording the means of additional gratification, stimulate producers to new exertions? Mr. MALTHUS' theory of profits, therefore, (which is in substance Dr. SMITH's,) would appear to be no better founded in fact than that of Mr. RICARDO—the former placing the limits to an increase of profit in the redundancy of capital, and the latter in the necessity of resorting to inferior soils to obtain additional produce.

In the view presented in the foregoing pages, of the natural progress of wealth and population, it may be objected that it places no limit to the fall in the prices of labour and produce. It is no doubt true that the point of their ultimate declension will be when the earth can be made, with the utmost improvements in science and by the increase of skill, to yield no more produce. Whenever the entire globe is cultivated to the utmost extent of its capacity to produce, and the

population which it is capable of maintaining on its surface is fully up to the measure of that capacity, both population and produce must come to a stop. Both will then remain stationary. But this does not invalidate the principle that they are capable of an increase up to this point. The period is very remote indeed at which they will have reached it, if rulers are wise enough to profit by the various resources which Nature places at their command for the benefit of those they govern. So distant indeed that we may not trouble ourselves about the consequences when that desirable consummation shall have been attained. The rate of increase, we must recollect, is slow, when things are left to take their natural course. We must not be deceived by the rapidity of the rate at which some countries occasionally augment in capital and population—in such cases it is a partial and not a general advance—an advance of one or more countries at the expense of others—an advantage that is temporary and is sure to be finally followed, when the re-action occurs, by a measure of suffering fully equal to the former impulse of prosperity received.

CHAPTER III.

MACHINERY.

IF the opinions expressed in the preceding chapters be correct, Mr. RICARDO's conclusion "that in proportion to the quantity and the durability of the fixed capital employed in any kind of production, the relative prices of those commodities on which such capital is employed will vary inversely as wages;** cannot be sustained. That doctrine is the inevitable inference from the writer's premises, in order to maintain the level of profit. We have endeavoured to show that in the natural progress of wealth and population, money wages fall as profits advance, and, if this be the correct view, Mr. RICARDO's inference that the fall in the price of goods produced by machinery or fixed capital, takes place in consequence of a rise in money wages or an advance in the price of labour, must be erroneous. If profits always fell as the price of labour rose, Mr. RICARDO's doctrine would seem to be necessary, as we have said, to the equilibrium of profit; but during a state of things the most favourable to his hypothesis, during the last general war in

* *Principles of Political Economy and Taxation*, chap. 1, p. 29.

Europe, money wages and profits advanced together in England, and the fall of goods arose, as it does in every such case, from additions made to fixed capital, or improvements in machinery. But on other considerations the doctrine is untenable. If the prices of manufactured commodities fall as the price of labour rises, then the prices of such commodities must rise as labour falls in price. Thus we have goods to advance in price while machinery is improving.

The only way to avoid this dilemma is to insist that in a natural state of things, the price of labour rises and never falls. Let us admit this, and see how the principle will work on this supposition. It is in proportion as fixed capital or machinery increases that the prices of goods manufactured by its agency are reduced ; but wages, in the new theory, encroach on profits as rapidly as they are increased, and any permanent addition to capital from revenue is in consequence prevented. How then is machinery to be increased, and how are the prices of goods to fall ? It cannot be meant that the addition to fixed capital is made from circulating capital, because, on such a supposition, the means of employing labour are diminishing, whilst wages are at the same time made to advance. In fact, it is precisely, in the natural progress of wealth, as wages fall and machinery is improved, that circulating capital increases, and in the same proportion with fixed capital. The proportions never vary, in a wholesome state of things, in any employment.

It is not to save labour, if *quantity* be meant, that machinery is improved—it is to save in the *price* or *wages* of labour that the machine is made. The effect of machinery, were it to displace labour, or make a less quantity necessary to production, would be an evi-

instead of a benefit. It would check the increase of population, for population augments in proportion as the prices of manufactured as well as agricultural products decline, and it is as money wages are reduced, and the revenue devoted to the payment of labour increases, that the prices of all commodities, in a natural state of things, fall. Circulating capital is not, therefore, more nor less necessary to fixed than fixed is to circulating capital. With every augmentation of the one description there is a proportional increase of the other in all employments. If we could suppose that they increased irregularly, or in varying proportions, whether machinery improved as labour was displaced, or labour was more fully employed as machinery was thrown out of use—on either supposition the progress of a country in wealth and population would be retarded.

The popular prejudice against machinery has in a great measure given way, because it is plainly seen that, with every increase of its powers, more labour is employed—with every additional reduction of wages is there a demand for an additional quantity of labour, or an additional number of labourers. It would appear, then, that fixed and circulating capital never vary in their proportions to each other. It is not meant by this that these two kinds of capital are always equal in quantity in the same employment. Some employments require a larger and others a less portion of the one or of the other.

It requires no reasoning to prove that the capital which is consumed and reproduced at short periods, and that which is replaced at long periods, is employed in the manufacture of products that must sell at such relative prices as will preserve the level of

profit; for if goods manufactured exclusively by labour, or partly by labour and partly by machinery, sold at such rates as would not put the manufacturer of them on the same footing as to profit with the capitalist who used fixed capital solely, or in a different proportion, no commodities could be manufactured at all by labour. The proposition is so obvious that it requires no reasoning to prove it.

If the view taken above of the effect of machinery be correct, the whole of the labour disposable in consequence of the improvement in its powers, will be required to obtain an increase of produce. But without an additional quantity of labour, in a still higher proportion than this, the augmentation of produce will not be as great as the wants of society will require. If there was not such additional quantity employed, it would be giving as great a rate of increase to machinery as to population, which is impossible. The extension of markets, both foreign and domestic, demands more produce than can be supplied unless all the labour which it is possible to obtain is employed. Thus, if we suppose a manufacturer of cloth to increase the powers of his machinery, in any given time, ten per cent. and consequently able to employ, from the fall in its price, the whole quantity of labour rendered disposable to the extent of this increase, he will not be able to meet the wants of consumers should the demand for cloth have augmented in a higher ratio. It must, however, augment in a higher ratio, for *the increase in the powers of machinery is limited by the faculties of the mind, and the demand for additional produce is determined by the procreative principle, or faculty, which is far more active.*

It is impossible to assign the relative rate of increase in the case of machinery and population. But if we suppose the increase of the former to be, in a given period, ten and the latter twenty per cent. if the manufacturer of cloth formerly employed 100 men and his improvements in machinery enabled him to manufacture an additional quantity of this commodity with the same number of labourers, he would be compelled to employ 110 men to produce as much cloth as the demand will take off; but he will obtain these 110 men at reduced wages, not merely in the proportion of the increase in the powers of his machinery, but in the higher proportion of the increase of population, otherwise he would make no addition to his profits by employing ten additional men. The rate of wages follows the rate of increase of labourers—as their number is augmented the price of their services must fall. And as we have seen that labour increases with every decline in the prices of raw and manufactured products, the labourers themselves are fully as much interested in improvements in machinery as the master producers. They obtain an increased quantity of the necessaries and conveniences of life from the fall in their price, and as the market for these products is extended, proportionally, so also is the market for labour. Thus is the actual population not more necessary to the actual produce than the latter to the former—without the actual numbers, the same quantity could neither be produced nor consumed. This appears to be the only rational explanation of the fact, that every invention that reduces the price of labour, has the effect of giving employment to an additional quantity—not only is there none displaced but more is demanded.

Mr. RICARDO attributes too much power to machinery. "If (says he) five millions of men could produce as much food and clothing as was necessary for ten millions, food and clothing for five millions would be the net revenue."* It is true that *if* five millions of men *could* produce as much food and clothing as was necessary for ten millions, this additional population would be at the expense of the net revenue. But if, when the population is five millions, fifty per cent. measures, in any given period, the rate of increase in the powers of machinery, or should it have improved so as to provide food and clothing for seven and a half millions, and the population has augmented, during such period, to ten millions, five millions with this additional power of production acquired by machinery, would be inadequate to that increase of produce required for the consumption of ten millions. To suppose any thing else is to give as great a rate of increase to machinery as to population.

The explanations that have been given by different writers of the effects of machinery on the labouring classes, appear to me to have been eminently unsatisfactory. Thus Mr. SAY says "whenever a new machine or a new and more expeditious process is *substituted* in the place of human labour previously in activity, *part* of the industrious human agents, whose services are thus ingeniously *dispensed with*, must needs be *thrown out of employ*." "In as much (he continues) as machinery produces that *evil*, it is clearly objectionable." Again—"New machines are slowly constructed, and still more slowly brought into use; so as to give time for those who are interested to

* *Principles of Political Economy and Taxation*, chap. Gross and Net Revenue, p. 374

take their measures, and for the public administration to provide a remedy.”* And, in a note, Mr. SAY has the following remarks. “Without having recourse to local or temporary restrictions on the use of new methods or machinery, which are invasions of the property of the inventors or fabricators, a benevolent administration can *make provision for the employment of supplanted or inactive labour in the construction of works of public utility* at the public expense; as of canals, roads, churches, or the like; *in extended colonization*; *in the transfer of population from one spot to another*. Employment is the more readily found for the hands thrown out of work by machinery, because they are commonly already inured to labour.” Now this explanation leaves the mind at a loss to conceive how the population accommodates itself to those changes which are natural to an improved state of society, in consequence not only of mechanical inventions that augment the quantity of manufactured products but of those discoveries in natural science which increase the produce of the land. It is obvious that room must be found *in the same occupation* for all the labour formerly employed in it, without occasioning even temporary distress, or the public administration being under the necessity of employing labour in the construction of works of public utility.

If there was not some principle, by which every change of this kind finds those who are to benefit by it, prepared to receive its full effect or influence, nothing but derangement between different employments would be the consequence. Every such change is slow and gradual, and time is allowed for its accommodation to existing circumstances or to the interests

* Treatise on Political Economy, pp. 30, 31

of all classes. Whenever any portion of the labour of society is employed in public works, it can only be done by its abstraction from private employments, and whenever it is so employed without any such abstraction, some derangement must previously have occurred by which the market was overstocked with labour. Even in the instance of a change of fashion, by the caprices of which it sometimes happens that distress is produced among a small part of the operatives, it happens that they find in the variety of employments of a wealthy society, a resource against want. In the case, however, of an improvement in machinery, there is no necessity for such a resource, or of a change from one employment to another similar to it, for this would be attended with some loss or inconvenience to the labourer. All such transitions, therefore, are so gradual that a provision is made in those arrangements which take place, *independently of all human interference*, in the natural progress of things, and no evil is ever experienced from the utmost extent to which such improvements can be carried, unless by the intermeddling of those who pretend to *regulate* the order of society. It would be an impeachment of the wisdom of Providence to suppose that the powers of human invention (in whatever mode these powers are displayed) are conferred that they may not be improved for the benefit of the human race to the fullest extent of their possible improvement, without occasioning any such derangement as must follow the displacement of a part of the labouring population from its regular and accustomed employments. Even in the invention of the art of printing, the most striking instance of a total change in the nature of the employment, who can pronounce that

the copyists were not prepared for the change, and did not find the transition easy and natural, and not sudden and abrupt?

We quote the following passage from Mr. SAY as an instance of very unphilosophical explanation on this subject and in obvious contradiction to all sound principles. “ It may be allowable to add that viewing human labour and machinery in the aggregate, in the supposition of the extreme case, viz. *that machinery should be brought to supersede human labour altogether, yet the numbers of mankind would not be thinned, for the sum total of products would be the same*, and there would probably be *less suffering to the poor and labouring classes to be apprehended*; for in that case the momentary fluctuations that distress the different branches of industry would *principally affect machinery, which, and not human labour, would be paralyzed*; and machinery cannot die of hunger: it can only cease to yield profit to its employers, who are generally farther removed from want than mere labourers.”*

The supposition made by Mr. SAY, in the above passage, is so extravagant that if it were possible to see it realized, the greatest disorder in the natural proportions between fixed and circulating capital, and even between capital in the aggregate and population would be the consequence. How could Mr. SAY conceive that “ the numbers of mankind would not be thinned and the sum total of products would be the same” if “ machinery should be brought to supersede human labour altogether?” Is not this at once destroying the ordinary proportions between fixed and circulating capital, or giving a rate of increase to the

* Treatise on Political Economy, p. 32.

former far more rapid than to the latter, or, which is still nearer the truth, allowing the one description of capital to augment to the entire destruction of the other? To contend that the amount of produce would be as great without as with labour, is giving an effect to machinery which it never can have—it is making population less necessary to production than to consumption and thence destroying the balance between them. Every increase of produce, unless the population has concurred in this increase with machinery, must subtract from profits, and in this proportion put a stop to any further improvement in machinery. Can Mr. SAY imagine a case in which there would be “less suffering to the poor and labouring classes” on “machinery being brought to supersede human labour altogether,” than when both are used in their due proportions; and how can he suppose “the momentary fluctuations that distress the different branches of industry would principally affect *machinery* and not *human labour*? ” The error of Mr. SAY is substantially the same as that which affects the labouring class itself, who invariably attribute a disproportionate influence to machinery.

CHAPTER IV.

VALUE AND PRICE.

IT were to be wished that writers on Political Economy had kept invariably in view the meaning they attach to the word *value*. If this had been done many of the points which have been made debateable in this science would have been determined with little or no difficulty. By almost all writers it has been considered as identical, under all circumstances, with price—whilst with very few has it been viewed as equivalent in meaning to *wealth* or *quantity*. Mr. RICARDO regards value as essentially different from riches, “for,” says he, “value depends not on abundance, but on the *difficulty* or *facility* of production.”* According to this definition, considered literally, value depends both on abundance and scarcity, for commodities are abundant as they are produced with facility, and scarce when produced with difficulty. If value depends on facility of production, then there is no difference between it and riches, for nations are rich in proportion as they produce with facility. If value depends on difficulty of production, then there is an obvious distinction between it and riches, for countries

* *Principles of Political Economy and Taxation*, chap. 18, p. 283

are poor which have to purchase their enjoyments by a great sacrifice of toil or exertion. According to one view of value, in the above definition, productions become valuable as they become scarce—according to the other view they become valuable as they become abundant.

But I suppose that the meaning of MR. RICARDO is that value depends on the *greater* or *less* difficulty or facility of production. Value, then, pursuant to this opinion, must diminish as the quantity of productions increases, or as they are produced with facility, and value must increase with the scarcity of productions, or as they are produced with difficulty—in other words, *value* is made, under all circumstances, equivalent in meaning to *price*, and MR. RICARDO consequently employs *relative* and *exchangeable* value, as if they were always convertible terms. Value and price differ, however, when demand is properly proportioned to supply, or when produce is distributed exactly according to the wants of consumers, or, which is the same thing, price is, under such circumstances, in an inverse proportion to quantity.

In the regular and natural progress of wealth, there is an increase in the quantity of all commodities, including labour; the whole augments in an equal ratio, and the exchangeable value of every part increases. The quantity of produce or of labour which each producer is able to command, is equal to the quantity parted with by every other producer. It is increased quantity exchanged against increased quantity; but it is precisely because quantity is increased universally, that prices fall universally, and in every quarter. But in such case, whilst exchangeable value has risen, relative value remains the same. Suppose that a ma-

manufacturer of hats exchanges this year 1000 hats for 1000 pair of shoes, but by an increase of skill he is able to make the following year 1200 hats, and the manufacturer of shoes increases his commodity in the same proportion, the value of hats, according to Mr. RICARDO, will have fallen, as well as the value of shoes ; but it is their *price* only which will have been reduced. The exchangeable value of both shoes and hats will have increased, for each commodity exchanges for a greater quantity of the other. Here, then, the relation of these commodities to each other, as to their prices, is unaltered, or their relative value continues as before, but their value when exchanged for each other has varied—it has increased.

This is no longer the case, however, when demand is not properly proportioned to supply, or when produce is not distributed according to the wants of those who are to consume it. In this state of things price and exchangeable value are identical, but the relation to each other, as to prices, of the commodities affected by the change, is altered. The prices of some rise, under these circumstances, and their exchangeable value is augmented, but the prices of others for which they are exchanged, must proportionally fall—in other words their value in exchange lessens. Suppose, to continue the illustration just employed, the shoes should not have increased in proportion to the hats ; in this case the exchangeable value of the hats and their price will have fallen, if the demand continues as before for both commodities, for in exchanging hats for shoes a greater quantity of the former must be parted with to obtain the same quantity as before of the latter. Thus suppose the difference in the increase to be twenty per cent.—in these circumstances 1200 hats must be

exchanged for 1000 pair of shoes instead of 1200 pair as before. The price and exchangeable value of shoes will have risen, and the exchangeable value and price of hats will have proportionally fallen.

If we now take the opposite supposition, and imagine that the quantity of hats has lessened whilst the quantity of shoes and the demand for both commodities continue as before—in this case the effects will be reversed, the exchangeable value and price of hats will have advanced whilst the price and exchangeable value of shoes will have been lowered, for instead of 1000 pair of shoes exchanging, as in the former instance, for 1200 hats, 1200 pair of the former must be parted with to obtain 1000 of the latter. In these cases it is supposed that the demand for each commodity is neither lessened nor increased, but this is not necessary to prove that price and exchangeable value are identical when demand and supply are not in exact or natural proportion to each other. The manufacturer of shoes (of which the quantity we have supposed not to have either increased or diminished) may augment his consumption of hats in proportion to their increased quantity. In this case the demand for hats will have risen, and their price and exchangeable value would be unaltered. If the manufacturer of shoes lessens his consumption of hats in the ratio of their increased quantity, the price as well as exchangeable value of hats must fall both from additional supply and diminished demand, and they will fall in a higher proportion, of course, than if the supply had merely increased. In this case 1400 hats must be exchanged for 1000 pair of shoes. These distinctions are not vain and unnecessary—they are essential to a clear understanding of the principles of the science.

The identification of *price* and *value in exchange*, under all circumstances, is, I am convinced, at the foundation of some of the peculiar views entertained by the school of Mr. RICARDO. The following paragraph will show how entirely this writer has confounded *price* with *value in exchange*.

“ For if an improved piece of machinery should enable us to make two pair of stockings instead of one, *without additional labour*, double the quantity would be given in exchange for a yard of cloth. If a similar improvement be made in the manufacture of cloth, stockings and cloth will be exchanged in the same proportions as before, but they both would have fallen in value, for in exchanging them for hats, for gold, or for other commodities in general, twice the quantity must be given. Extend the improvement to the production of gold and every other commodity, and they will all regain their former proportions. There will be double the quantity of commodities annually produced in the country, and therefore the wealth of the country will be doubled, but this wealth will not have increased in value.”* The wealth will not have increased in *value*, if by *value price* be meant. The productions of which this wealth consisted will have fallen in *price*, and if this is meant by the expression “ the wealth will not have increased in value,” the remark is correct—it will have fallen in *value*. But Mr. RICARDO has said that “ if a similar improvement be made in the manufacture of cloth to what is made in the manufacture of stockings, they will have fallen in value; for in exchanging them for hats, for gold, or other commodities in general, twice the former quantity must be given.” Now it is precisely because

* *Principles of Political Economy and Taxation*, chap. 18, p. 288.

double the quantity of cloth and stockings is given for double the quantity of hats and gold and other commodities to which the improvement has extended, that the cloth and stockings have increased in exchangeable value equally with the hats and gold. They will, therefore, if value in exchange be meant, have augmented in value, in consequence of an additional quantity of the two former commodities being given for an additional quantity of the two latter. Not only will the wealth of the country be doubled, but that wealth will have derived twice its former value in exchange. Again :

“ Although,” says Mr. RICARDO, “ ADAM SMITH has given the correct description of riches, which I have more than once noticed, he afterwards explains them differently, and says ‘ that a man must be rich or poor according to the quantity of labour which he can afford to purchase.’ Now,” continues Mr. RICARDO, “ this description differs essentially from the other, and is certainly incorrect; for suppose the mines were to become more productive, so that gold and silver fell in value [price] from the greater facility of their production; or that velvets were to be manufactured with so much less labour than before, that they fell to half their former value, [price,] the riches of all those who purchased those commodities would be increased; one man might increase the quantity of his plate, another might buy double the quantity of velvet; but with the possession of this additional plate and velvet they could employ no more additional labour than before; because as the *exchangeable value* of velvet and plate *would be lowered*, they must part with proportionally more of these species of riches to purchase a day’s labour. Riches then cannot be esti-

mated by the quantity of labour which they can purchase.”*

Now if it were true that the quantity of labour is not increased proportionally with the quantity of commodities, and its price did not fall also in proportion to the fall in these, Mr. RICARDO’s conclusions would be inevitable. But the supposition of a rise in the price of labour with the increase of its supply, which he takes for granted in all his reasonings, cannot, as we have endeavoured to show, be admitted. Mr. RICARDO, therefore, evidently views labour erroneously when he considers it as not subject to the same laws that regulate the increase and the prices of commodities in general. It is obvious that without this condition of a constant and equal augmentation in the supply of labour with capital, and a proportionate fall of its price with the price of productions generally, that both the power and the will to accumulate would cease on the part of producers. The power to accumulate is founded on the reduced wages of labour; for it is by savings in these that capital is made available for an increase of population, and it is by the consequent addition to the number of working producers that productions are multiplied and profits still further augmented.

To suppose the quantity of labour not to increase equally with the quantity of commodities, is to give greater efficiency to fixed than to circulating capital. But we know that more labour, in every period of society from the most rude to the most refined, is rendered as necessary to the increase of produce, equal to the wants of the population, as this increase is to provide for its maintenance and employment. What

* *Principles of Political Economy and Taxation*, chap. 18, p. 289.

possible inducement could the capitalist have to save in the expenses of production if he could not command more labour at a reduced price, or for the same amount in money.

How could the fact be reconciled of the extended market for labour, unless on the supposition that the quantity of commodities is by this means multiplied, and the market for them extended also. Mr. RICARDO has then laboured under a palpable error in saying that “A certain quantity of clothes and provisions will maintain and employ the same number of men, and will therefore procure the same quantity of work to be done, whether they be produced by the labour of 100 or 200 men ;”* for it is obvious that without the 200 men the same quantity of work will not be done, or such a quantity of clothes and provisions provided as will maintain and employ the 200. Neither the power nor the inducement to provide clothes and provisions for 200 men could possibly, under such circumstances, exist. Dr. SMITH is then correct in saying “that a man must be rich or poor according to the quantity of labour which he can afford to purchase.” It is only another form of expression, in describing an equivalent effect, to assert that a man must be rich or poor according to the quantity of *labour* instead of the quantity of *commodities* which he can afford to purchase, for these quantities are equal when demand is exactly equal to supply, as regards both labour and commodities.

It follows, from this view of the subject, that if, according to Mr. RICARDO, the *quantity* of labour expended on commodities governs their price, when market and natural prices correspond, it can have no

* *Principles of Political Economy and Taxation*, chap. 18, p. 290.

influence on their *exchangeable value*; for then value in exchange and prices rise and fall in an inverse ratio. But neither can the *quantity* of labour govern the *prices* of commodities, in such a state of things, for we have shown that prices decrease as the quantity of labour increases, or they advance and lessen also in an inverse ratio. But it is the *price* of labour that governs the prices of commodities, for they rise and fall together. The price of labour does not, however, regulate the prices of commodities more than the prices of these do the price of labour. They have a mutual influence and fall in regular and equal proportion.

It cannot be pretended that the quantity of labour bestowed on productions has any influence on their prices, as these prices vary from natural prices, for as in such case commodities are not increased but their distribution only altered, there can be no increased quantity of labour employed. There is an increase of produce in some quarters, but attended, of course, by a proportional diminution in others.

The following passage affords a further proof that Mr. RICARDO has attached to exchangeable value a meaning that belongs only to price in the circumstances supposed. "In contradiction to the opinion of ADAM SMITH, Mr. SAY, in the 4th chapter of his work, speaks of the value which is given to commodities by natural agents, such as the sun, the air, the pressure of the atmosphere, &c. which are sometimes substituted for the labour of man, and sometimes concur with him in producing. But these natural agents, though they add greatly to *value in use*, NEVER ADD EXCHANGEABLE VALUE, of which Mr. SAY is speaking, to any commodity: as soon as by the aid of machinery, or by the knowledge of natural philosophy, you oblige natural

agents to do the work which was before done by man, the *exchangeable value* of such work *falls* accordingly.”*

Mr. SAY is no doubt correct when he states, that natural agents and machinery add to the exchangeable value of the productions which by their aid have been increased in quantity, and in the ratio of this increase have fallen in price, provided that they are not produced in excess. If the demand will not take off the whole quantity supplied, we have shown that the fall in price and exchangeable value are coincident. If the distinction between the cases is not observed, the partial increase of wealth—or its increase in some quarters, (attended by its diminution in others,) will be mistaken for that general increase in which all producers participate, when prices vary inversely to value in exchange. It will be found, in a wholesome state of things, that the augmentation of the quantity of a commodity is always accompanied by the augmentation of others for which it is exchanged, or that the motive or the will to add to the powers of production, operates equally on all producers, so as to cause an increase in the quantity of all the objects of consumption, as well as of the labour by which they are to be obtained.

Nor is the principle that determines the exchangeable value of commodities different in a rude from an improved state of society. Dr. SMITH, has said, “that in that early and rude state of society that precedes the accumulation of capital and the appropriation of land, the proportion between the quantities of labour necessary for acquiring different objects seems to be the only circumstance which can afford any rule for

* *Principles of Political Economy and Taxation*, chap. 18, p. 293.

exchanging them for one another."* Now if this principle be true, in its application to one period of society, it must be true in its application to all. We have shown that the exchangeable value of commodities in an improved period, is determined by the degree of skill and science to which society has attained—it is the same thing, when by the address and sagacity of the savage, he can either with the aid of natural agents, or by the improvement of his rude weapons or implements, acquire in less time a greater quantity of those objects which he usually exchanges for others. A fisherman to take twenty salmon employs a day's labour, but, by his ingenuity, discovers means of taking, within the same time, forty salmon. Now will it be contended that this additional quantity of salmon will exchange for an additional quantity of game, unless the same improvement has been extended to this commodity also? If the hunter has been able to effect the same increase by equal address and skill, both parties to the exchange will gain in an equal proportion. Whether the fisherman will continue to catch twenty salmon or forty, will depend of course upon the demand of the hunter for salmon or the supply of his commodity. If the consumption of the fish has increased, as it will most probably be, the hunter will have been able to increase his commodity to render the exchange advantageous to both parties. But this is precisely the principle that regulates the exchange of commodities in an improved period of society. If we suppose the existence of a market for labour in the ruder period, it would be found that it had fallen in price as well as game and salmon. These

* *Wealth of Nations*, book 1, chap. 5.

productions would more nearly measure the value of each other and of labour in the rude than in the improved period, for then there are fewer causes in action to disturb the natural proportion between demand and supply.

CHAPTER V.

MONET.

WE have endeavoured to show that in the natural progress of society all commodities as well as labour fall in price. But money, or the material of money, is a commodity subject to the same laws and therefore to the same changes in exchangeable value as other commodities. It has its natural as well as its market price. In the regular progress of wealth and population, it must rise in exchangeable value,* or exchange for a greater quantity of produce, as its quantity increases, or as improvements are made in the machinery by which it is produced. An increased quantity of commodities requires an increased quantity of money to circulate them, for the number of exchanges is proportionally augmented, and it is precisely equivalent to say that labour with agricultural and manufactured products increase in quantity or rise in exchangeable value, as to assert that money or its material increases in quantity or rises in exchangeable value. Each commodity would be a measure of value

* I allude of course to the whole mass, and not to any particular portion of money.

of every other, if market prices always corresponded with natural prices. Equal quantities of labour in one employment, would exchange for equal quantities in every other employment, allowing for their comparative disadvantages.

But although this supposition of a perfect correspondence between natural and market prices is necessary to a settlement of first principles, the disturbing influence of taxation, restrictions on trade, &c. which perpetually change the natural proportions between demand and supply, have a correspondent influence on prices—either elevating market prices above or reducing them below natural prices. Whenever market prices rise above or fall below natural prices, it always terminates in a proportional decrease or increase of the relative value of money. Whilst, therefore, we are investigating the effects of taxation, restrictions on commerce, &c. on the relative value of money, we are at the same time investigating the effects of these circumstances on the value of those commodities for which it is exchanged.

We have seen that an increase in the quantity, whether of labour or commodities, reduces their price—a diminished quantity must therefore elevate their price. Taxation diminishes the quantity of a country's productions, in proportion to the amount of the taxes imposed; they must then proportionally diminish the quantity of money in that country, for the quantity of money must bear a relative proportion to the quantity of commodities and labour it has to circulate, or to the number of exchanges it has to effect, as its value must bear the same proportion to the demand for it as a medium of circulation. Taxation is, however, constantly and happily counteracted in its effects by

an increase of productive power. Were this not the case, population and capital would decline to that point at which the amount of taxation would permit them to remain. They are opposite forces, if we can so express it, in the economical world, and as the one or the other prevails is a country in the enjoyment of wealth or suffering from poverty. It is necessary, however, for the proper elucidation of the subject, that we should first consider the results of taxation separately from the consequences of an increase of productive power, and afterwards in their combination.

Let us then commence with the effects of taxation on the value of money. Let us suppose a tax imposed on income and the government to export the money in payment of a subsidy. The *first* effect of such a tax would be to diminish demand for labour and produce. The persons who contribute to the payment of the tax will have a smaller money amount to devote to the purchase of commodities than before the imposition of the tax. Commodities could not possibly bear the same proportion as before to the medium of circulation. The excess would be exported in exchange for money which had risen in relative value. The effect would be the restoration of the former proportions between money and commodities and the value of both would come to a level. The quantity which each consumer could command of both would be lessened. As the prices of commodities had fallen, in the first instance, from diminished demand, so they ultimately rise from diminished supply, and as the value of money had risen in consequence of its exportation, its return in exchange for the excess of the commodities exported, will be in proportion only

NOTES ON

It will have fallen ultimately in value exactly in the ratio that commodities have fallen, because its quantity has been reduced in the same ratio.

If we suppose the tax to have been collected in kind—in corn, for instance, the final effects would be precisely the same. In such case, if the government export the corn to feed its troops abroad, or for any other purpose, money would be in excess compared with commodities, and instead of its being the *first* it would be the *last* exported. It would be profitable to send it abroad in exchange for commodities which had risen at home, as in the other case it was profitable to send commodities abroad in exchange for money which had risen at home. In both cases the quantity of both will have been equally diminished and the exchangeable value of both ultimately and equally reduced.

This deduction of effects is founded, however, on the idea that the tax reduces consumption equally and at the same time of commodities of every kind; but this supposition, although it has been adopted to simplify the explanation, and is theoretically true, never occurs in fact. The imposition of a tax is attended, in the great majority of cases, by a reduction of expenditure on certain objects with the same expenditure on others—with a diminished consumption of luxuries that the wants of consumers may be satisfied for articles of more necessary consumption. In such case the price of necessaries will not *at first* fall, for the demand continues as before, but the price of luxuries will be reduced as the consumption of them has been diminished. But the producers of luxuries are also the consumers of necessaries—the decline in the de-

mand for the commodities they produce, will compel them to lessen their consumption of other productions. The producers of necessaries will obtain for a short period higher relative prices and profits than the producers of luxuries, but the level of prices, and of course of profits, will soon be adjusted, and all commodities, whether luxuries or necessaries, will settle at a higher price than before. The whole quantity of commodities, money included, will be reduced in proportion to the tax, and every man's portion, or power to command the former portion, is finally diminished.

If money was not altered in value—if as large a quantity could be obtained in exchange for the same quantity of commodities as before, these results would not take place. But as the principle cannot admit of dispute, that money lessens as the quantity of productions it has to circulate diminishes, or, which is the same thing, that it is subtracted from the circulation as the number of exchanges it has to perform is reduced—it follows necessarily that the command of money, whether by rich or poor consumers, is abridged with the progress of taxation; they must make a greater sacrifice, if they wish to obtain the same amount of the conveniences or luxuries of life as before the tax was imposed. It will be recollected that we are considering the consequences of taxation on the value of money and produce generally, without any countervailing effect from an increase of productive power. Restrictions on trade produce precisely the same effects on the value of money as taxation. They prevent the market from being as fully supplied as it would be with commodities if the restrictions did not exist. They, therefore, compel the exportation of the money of the country, in which

NOTES ON

ed, exactly to the extent of the relative
whole quantity of the currency to the
whole quantity of productions it has to circulate.

Actions, however, and the same may be said of bounties, whether on production or exportation, are only of temporary advantage to those whose interests they appear to favour. It is merely whilst capital and labour are shifting from the employments which do not to those which do benefit by those restrictions that higher profits are derived by the capitalists who are thus favoured. Profits soon come to a level, for competition must adjust them to the general rate. The prices of all commodities are prevented from falling as low as they would have been reduced to, if the restrictions had not existed. They therefore eventually re-act on those in whose favour they are passed, unless the duty or bounty is increased as soon as the equilibrium of profit is restored.

Another cause that affects the value of money is the issue of paper, as a medium of circulation, by the state, or when such issue takes the form of a loan from banking institutions to the government, which is in effect the same thing. Such loan or issue is only another name for a tax or taxes—it is taxation in disguise and like the foreign duties, blend the tax with the prices of commodities. The same results follow precisely as when taxes are *directly* imposed. The metallic money, which is the standard, is exported, in proportion as the whole quantity of currency exceeds the whole quantity of productions to be circulated, or number of exchanges to be performed, and the *value in exchange* of the whole produce with that of money, finally settles at a lower point than previous to the loan or emission, or, which is the same

thing, prices are prevented falling to their just and natural level. The issues of banks to individuals also cause the exportation of a part of the gold or silver employed in the circulation, precisely in the ratio also of the excess, and the same results are produced.

We have thus seen the effects on the value of money from those circumstances which disturb the natural progress of wealth and population, or which produce a variation between natural and market prices. In all these cases we have been supposing taxation, restrictions, bounties, &c. to operate without check or restraint.

An increase in the powers of production may, however, as I before remarked, counteract the consequences of an increase of taxation, although considerable; the quantity of commodities thrown into the market by producers may exceed the quantity taken out by government, and the tendency to a decline in national wealth from taxes, restrictions, &c. may be counteracted by an opposite tendency still stronger. If the effects from these opposing causes balance each other, countries subject to their influence would of course be stationary in wealth and population. If no disturbing influence were to take place in the due equilibrium between money and the commodities it has to circulate, the level of prices would be unaltered, and money or the material of money would be imported during the progress of improvement, for an additional quantity would be wanted for the increasing business of society. If countries continued in a stationary condition, money would be neither imported nor exported. But, according to the principles we have been explaining, any degree of taxation whatever must produce a correspondent effect on the level between money and the

produce it is employed to circulate. The same may be said of bounties, restrictions, &c.

It may be supposed, however, that an extraordinary stimulus being given to the industry and commerce of a particular country, the demand for additional currency may increase more rapidly than the supply of the precious metals could be augmented from abroad, and that in such case an issue of paper, supposing the currency to consist entirely of one or the other of the precious metals, might take place without producing disturbance, provided that the issue was no greater than in proportion to the increase of produce. But these are erroneous conclusions: For

First, The increased powers of production of one or more countries, in such case, is no more than equal to the diminution of the productive powers of other nations of the commercial world. If the country receiving an unusual stimulus requires an additional quantity of money in a shorter period than bullion can be produced at the mines, those countries whose progress in improvement must have been necessarily retarded, will have a redundancy of the precious metals which they would be ready and willing to exchange for the commodities which their wants or habits made necessary to them. Thus the nations of the continent of Europe, during the long contest into which Buonaparte's domination drove them, must have suspended in great part their powers of production and encroached on their capitals. They had therefore a surplus of the precious metals which would have been imported into Great Britain and the United States in payment for the manufactures and colonial produce of the former and the raw produce of the latter, if the circulation of both countries had not been for a great

part of the time surcharged with paper. Instead of specie finding its way into the United States and Great Britain, therefore, in proportion to their increased want of money, it was excluded by their paper issues, and was even driven abroad to countries where it went to increase the prices of those foreign commodities which were necessary to their consumption. But

Secondly, Neither is it possible to introduce even the smallest amount of paper into the circulation without producing disturbance of prices, although it should not exceed the quantity of gold or silver that would have circulated in place of it. If it were possible to add paper to the circulating medium *in the same manner* that the precious metals are added to it, in the regular progress of improvement, no derangement could occur. If this be true, paper money cannot be productive of national advantage, as by leading to a disturbance of prices it must alter the level of profits between different employments, and terminate in much individual loss and distress. The currency which a contrary opinion has so long obtained, is truly surprising. Dr. SMITH's views on the subject of money in general, and paper money in particular, have assisted in giving an extensive and lasting influence to error in this branch of Political Economy.

His misconception in this matter consisted in viewing the expense of procuring and supporting the precious metals for the purposes of money as a deduction from the net revenue of society. But if it can be made to appear that the amount of population and produce would have been greater, in any given period, with than without the use of the precious metals as money, Dr. SMITH must be condemned on his own principles. He has very properly considered the

maintenance of the actual population as no deduction from the net revenue of society, because the productive classes reproduce a greater value than they consume during their maintenance. It was on this principle that he successfully overthrew the theory of the Economists. But if this be correct, and it can be shown that the produce and population of a country would be less in any given period with than without the use of paper as the instrument of circulation, the contradiction between Dr. SMITH's opinions in regard to money generally, and those he has expressed in relation to the Economical theory, will be made out. This it will be our purpose now to show.

If it were correct, that on the substitution of paper for the precious metals as money, *an equal rise in the prices of all commodities* took place, the consequences which have been deduced from this principle could not fail to occur. But I am satisfied that its too ready admission has been the origin of the various disputes that have occurred in regard to money and exchange.

It must always be borne in mind, that there can be no variation in prices unless the due proportion has been altered between demand and supply, and whether the alteration has its origin in the quantity of circulating medium exchanged for the commodities which have varied in price or in the quantity of commodities themselves, the effects on price are identical. Setting out from this principle, it can be made to appear that whenever a rise of prices takes place on an issue of paper, it is *partial* and not *general*, and that the rise is only in certain articles for which the demand will have increased, accompanied by an equivalent fall in the prices of other articles which will have experienced, in the same degree, diminished demand. Let us trace

the consequences of an emission of paper which displaces an equal amount of one or the other of the precious metals from the circulation. The demand for those particular commodities of which additional competition will have augmented the price, in consequence of the issue, will be, of course, in proportion to the increased quantity of circulating medium for which they are exchanged.

We have said that this will be accompanied by an equivalent fall in the prices of other commodities for which the demand will in an equal degree have diminished, or, which is the same thing, which will have been exchanged for a smaller quantity of circulating medium. The point of inquiry then is, what portion of the national produce is it for which the demand will in this manner have lessened and the price been reduced? The answer is obvious—that portion which it was usual to send abroad in exchange for bullion. Thus, suppose, to confine ourselves to a single commodity, that we may simplify the explanation, that it had been usual to export cloth to purchase bullion in some country possessed of mines of the precious metals. If the amount of paper issued in one year be one million of dollars, and the value of cloth which would, in the same year, have been exported to be exchanged for bullion abroad, have been five millions, the price of cloth will fall in the foreign market to which it had been customary to send it, one fifth.

It will be obvious, on the smallest reflection, that the diminution in the demand for bullion, to be converted into money, in the country employing paper, will compel the producers abroad of bullion to lessen their demand in an equal degree for cloth, and that the value of the exports of the country which em-

ploys paper will fall precisely in proportion to this reduced demand. The value of the cloth exported will be therefore *four* millions instead of *five*. This will turn the balance of payments against the country suffering under this disadvantage, and compel it to export some other commodity, of the value of one million, to restore the balance or to bring the exchange to par should it have been previously at par. This commodity will be money, for money when in that state that renders it fit for exportation, is to be viewed as subject to the same laws as commodities in general. It is precisely that portion and no other of the metallic money, to the amount of one million, of the country the value of whose exports has thus lessened, that had been previously applied to the purchase and transmission of cloth to be exchanged abroad for bullion, and which, being no longer applicable to this purpose, is exported to pay a balance of debt created by an emission of paper to the same amount, in the manner above described.

The producers of cloth will necessarily experience a fall of profit in proportion to the diminished demand for that commodity, and will have to remove a portion of their capital to some other employment. A part of their gains will be transferred to the producers of the commodity or commodities of which the issue of paper had in the first instance raised the price. This class of capitalists will have a larger money amount to devote to the purchase of articles either of necessity or enjoyment than those whose productions have fallen in price. The wages of the labourers in the employments thus favoured, must increase to the correspondent diminution of the wages of those who were engaged in the preparation for the foreign

market of that portion of produce for which the demand has lessened.

Thus, we have seen, that if one million of dollars in specie be exported from the introduction of paper to the same amount, and this sum bear the proportion in value of one fifth to that of the produce it circulated, this portion of produce will unavoidably fall in value from *five* to *four* millions in consequence of diminished demand. There being no market abroad for one fifth part of it, except at a reduced price, its production will be discontinued in this proportion. Now, if we suppose that fifty millions of dollars constitute the amount of the precious metals that would have circulated in a particular country, in any given period, if paper had not been introduced into its circulation, it is obvious that such country, if it adopts paper to an equal amount as a medium of exchange, will, at the end of such period, have a less value in produce by fifty millions of dollars than if it had employed one or the other of the precious metals for money. The amount of its population would, at the end of the same period, be also less in the ratio of the numbers which would have been required to raise or manufacture the value of these fifty millions. It is in this manner we conceive that every issue of paper will discourage production and population to the extent of such issue. But if the power of a country is to be estimated by the amount of its wealth and population together, the conclusion that it will not be as powerful with the use of paper as with the use of either of the precious metals, as the instrument of circulation, seems inevitable.

It is evident also that the effect on the value of the exports which have been deduced from an issue of

paper, must follow from whatever circumstance deranges prices, whether it be an alteration of the standard, a deterioration of the coin in any mode or degree, an increase of the taxes, or restrictions on commercial intercourse. Each of these causes leads to the exportation of a less value than would have gone abroad if it had not exerted a disturbing influence on prices—or, in other words, the balance of payments is turned against the country subject to either of these disadvantages. In every case, therefore, of an undue increase of the circulating medium, when it is said that a commodity is in consequence raised in price, it is merely a different form of expression, but the same in substance, as if it were asserted that it exchanges for a greater quantity of money. In the same manner, when it is said that a commodity has fallen in price, unless it is from excess in the supply, it is identical with the assertion that it exchanges for a smaller quantity of money, and the rise in the one case and the fall in the other, are both consequences of the same cause of disturbance. The idea, then, of a *general* fall in the value of money, as regards a particular country, or, which is the same thing, a *general* rise in the prices of its commodities, under the circumstances supposed, cannot be correct.

The question as to the origin of high or low prices resolves itself, therefore, in every instance, into a single point, whether the alteration is in the demand or supply of the article or articles for which money is exchanged. If the terms depreciation or fall in value, as regards money, are meant to convey the meaning that the quantity of currency given in exchange for articles which are high in price is greater than when their price is less, the proposition cannot admit of

dispute. In this sense the idea of a fall in value or depreciation of money, if confined to that portion only which is exchanged for such articles, is sufficiently intelligible. But the fall in the value of money in such case, is the same thing as the rise in value of the articles for which it is exchanged. In this sense, also, the quantity of money which is given in exchange for articles which have fallen in price, may be said to be less than when their price is higher, or, in other words, that portion of the currency exchanged for articles which have been reduced in value, must have risen in value relatively to those articles.

If we are correct in these views, the opinion of modern Economists, that by the use of paper money the quantity of the precious metals displaced is a clear addition to national wealth, by the value of the returns received for it abroad, must be erroneous. We have, we think, shown that the specie exported in such case is not replaced by an equivalent value imported, but on the contrary by a less value.* We thus see that the dispute whether the exportation of the precious metals has its origin in a balance of debt, or what is sometimes called a balance of trade, or in an alteration of the value of the circulating medium, has been vain and illusory.

It also results from these views, that as the balance between produce and consumption is always disturbed from whatever cause alters that natural distribution of

* Dr. SMITH, although correct in saying that by the substitution of paper there was an equal amount of the metallic money exported, did not perceive that this was to pay a balance of debt, or to make up for the deficiency in the value of the exports caused by this substitution of paper, and that the fall in the price of certain portions of the produce in an equal degree that the price of other portions had risen, is the only mode of relieving the circulation of the superfluous quantity of circulating medium.

capital which takes place when prices are not deranged, the use of paper money has the same effect on the progress of wealth as taxation and restrictions on commercial intercourse. And we find, accordingly, that nations become more thrifless in proportion as they depart from the use of a medium of circulation possessed of intrinsic value. It would seem essential to maintain the level between production and expenditure (should taxation even not exist) that the instrument of exchange should not be too cheaply acquired either by governments or individuals.

I am satisfied that if the resources of Political Economy were such as to allow us to ascertain the truth of the position that paper has been instead of a cheap a very costly instrument of circulation. If it has given an extraordinary stimulus to the productive powers of nations which have adopted it, in certain employments, it has been followed, if not accompanied, by a proportional relaxation in others ; by a more than corresponding expenditure on the part of that class of producers who have derived great relative gains, and by all who have obtained so cheap an instrument without any present sacrifice or exertion.

We do not by any means admit then the position, that if nations could substitute paper for the whole or any part of the precious metals as money, without causing, at frequent periods, a derangement of prices, such a result would be desirable, as it must render, as we have shown, the amount of population and produce less with than without its employment. But when we look at the impossibility of devising a check that will operate with uniform effect on the issuers—when we witness the tremendous abuses of this power which have distinguished our day—at the revolutions

of property, the violations of private and public faith, the relaxation of morals generally which it has occasioned, we do not believe that the world has ever been afflicted with a moral evil, under the disguise of a public benefit, more pestilent and dreadful. Whatever discovery of a cheaper medium of commerce than gold or silver may hereafter be made, I conceive that, in addition to its other qualities, to fit it for this purpose, it must possess intrinsic value. It must be obtained by a certain quantity of labour or personal exertion equal in value to that parted with. To discover such an instrument would produce the same effect on the progress of wealth as an increase in the powers of production, it would reduce prices generally. But the real cheapness of such an instrument will be found, we apprehend, not in substituting that which possesses no value intrinsically—which costs no expense of labour or capital, except what employs the makers and signers of notes, but in procuring the additional quantity of the precious metals required for the increasing wants of commerce and industry at a relatively less expenditure—by improving the processes of extracting and refining the ores now in use.

The causes enumerated in the course of this chapter are the only ones, we believe, that disturb prices and thence alter the equilibrium of the money of countries. This, however, does not appear to be Mr. RICARDO's opinion. He has stated “that the *improvement of a manufacture* tends to alter the distribution of the precious metals amongst the nations of the world.”* And, in the next page, the following remark occurs. “In the former part of this work we have assumed, for the purpose of argument, that money always continued

* *Principles of Political Economy and Taxation*, chap. 6, p. 122.

of the same value ; we are now endeavouring to show that besides the ordinary variations in the value of money, and those which are common to the whole commercial world, there are also partial variations to which money is subject in particular countries ; and, in fact, that the value of money is never the same in any two countries, depending as it does on relative taxation on *manufacturing skill*, on the *advantages of climate*, natural productions, and many other causes."

How could Mr. RICARDO conceive that any "advantage of climate" or of "manufacturing skill" could occasion an alteration of the distribution of the precious metals ? Do nations possessing either a natural or artificial advantage improve it so as to adapt the products they raise or manufacture for foreign markets, unless they can obtain *by a trade of barter* an equivalent quantity of foreign commodities better suited to their necessities or enjoyments ? Or will any country improve its manufacturing skill or its natural advantages, unless such improvement is met by a correspondent improvement of another kind, in some other quarter of the world with which it has commercial intercourse ? The motive to make every such improvement is reciprocal, and the advantages received must be also reciprocal, or it never would be made. But in such a state of things, although money or the material of money may be imported, it can never be exported—we mean that the level is never altered when no disturbing influence exists which compels nations to receive or part with a greater quantity of money than is required for their natural or regular wants.

Each country of the commercial world imports an increased quantity of bullion, or money, in conse-

quence of its improvements in agriculture and manufactures. The case put by Mr. RICARDO cannot be supposed to exist. Admit its existence and countries would cease to trade on equal terms. Grant that money ebbs and flows as one country is favoured by nature more than another for raising a certain species of produce, or as one nation manufactures certain goods with greater comparative skill than another, and we at once confound the distinction between that increase of wealth in which all countries permanently participate, from the improvement of their peculiar advantages either from nature or art, with that partial and temporary augmentation of riches, which is, for the time it lasts, altogether on one side—in which what is gained by one of the parties to the intercourse is lost by the other. It is in fact carrying us back to the leading principle of the Mercantile system.

Instead, then, of viewing that variation in the equilibrium of money between countries which leads to its exportation and importation as the effect of derangement, it is attributed by Mr. RICARDO to causes that tend to prevent or counteract such derangement, and keep the money of countries at rest, instead of that state of movement which alters their proper distribution among the nations of the commercial world. The comparative value of the precious metals between countries is not to be determined by the comparative quantity in each, but by the proportion which the amount in each bears to its wants both for the purposes of money and ordinary manufacture. Rich nations have an abundance of these metals because they require an abundance both for circulation and other uses. Their large powers of production demand a greater quantity than countries whose productive

powers are more limited. The value of money in different countries may therefore be very unequal—it may exchange in one nation for a smaller and in another for a greater quantity of commodities, and this inequality of value may continue or may increase without causing disturbance in the equilibrium of the precious metals, and altering their distribution among nations.

It will be recollected that the distribution of these metals is not varied, although one nation should export coined metal and another receive it in exchange for its productions, provided that the country exporting the coined metal employs its capital in coining money for the supply of other countries, for this is in fact a species of manufacture, the raw material of which may have been purchased from countries possessed of the mines. It is still a trade of barter, for the nation importing the coined money pays the price of the raw material as well as the workmanship added to it by the coinage, by the export of a portion of its produce. When England exchanges her manufactures for the gold bullion or dollars of Mexico, it occasions no more disturbance in the due proportion between her currency and the business it has to perform, than if she had given her goods in exchange for the corn of Poland. It appears to us, then, that Mr. RICARDO has confounded two circumstances which are entirely distinct, namely, the import of money, or its material, from countries which produce the precious metals, or manufacture them into coin, with their importation from countries which neither produce nor manufacture them, but are sometimes under the necessity of sending them abroad to discharge a balance of debt or to restore the proportion which has been lost between

their currency and the number of exchanges it has to effect.

Nor is the relative value of money and its equilibrium altered from the greater or less distance from the mines of countries trading together. This is a circumstance which gives a higher exchangeable value to the precious metals in some countries than in others. Nations at a great distance from the mines have to part with a greater quantity of the produce of their industry in exchange for gold and silver than countries more near, but as this does not alter the proportion between their money and the quantity of produce it has to circulate, no derangement of prices can take place, and no variation consequently in comparative value with the money of countries more fortunately situated. Under every aspect, therefore, that we can view the subject, it is impossible to conceive the existence of any other causes that will disturb prices and the equilibrium of the precious metals between countries, than those we have enumerated.

CHAPTER VI.

EXCHANGE.

If the reasoning be accurate in the preceding chapter, the distinction between the *real* and the *nominal* exchange falls at once to the ground. The numerous and prolonged controversies to which this subject has given rise in England, consequent on the restriction of cash payments there, turn out then to have been merely verbal. Every variation in the exchange is reducible to a *single* principle, to wit, an alteration in the due proportion between the demand and the supply of bills, or, which is the same thing, to an increase or diminution in the value of the exports. The various causes which produce an alteration in the value of the exports may exert a combined influence, and to assign to each its share in producing the whole effect, is plainly impossible. An increase of the taxes may be made at the very moment of a large issue of paper, and these causes may be united with restrictions on commercial intercourse that did not exist before. If at such period an unfavourable harvest should occur, the value of the exports relatively to the imports would be still further lessened, and the fall in the exchange proportionally increased.

In the case of a failure of the harvest or of a war expenditure abroad which compels the export of bullion, there will be an increased quantity of the circulating medium applied to the purchase of this article for exportation, which will be equivalent to the diminished quantity applied to the purchase of other articles, which from their consequent fall of price will be exported to pay a balance. But whether the exportation of the precious metals be a *cause* or a *consequence* of an unfavourable balance, it can make no difference in the value of the exports and in the state of the exchange. If the disturbing cause is of equal influence, the encouragement to export will be also equal, and the balance will be restored in an equal period of time. If money or bullion is exported, in the first instance, commodities will be subsequently sent abroad to discharge an unfavourable balance. When it is said, therefore, that an unfavourable exchange increases the exports, the expression is not less applicable to the export of money when the balance is to be discharged by sending *it* abroad, as by sending *commodities* abroad when there arises a necessity of first exporting money.

If the usual level of prices between countries is not disturbed by war, a highly unfavourable exchange will soon be rectified, but if a particular country is in the receipt of great profits from war demand abroad, or from the suspension of the powers of production of those countries which consume unproductively, it is impossible to prescribe the limit either to the degree or the duration of an unfavourable exchange, as long at least as the profits of such country are proportionally high. It must always be recollected that the *real* limit to an unfavourable exchange consists in the in-

bility of the country subject to this disadvantage to consume any longer at high prices. Every increase in the premium of exchange is an additional tax on consumption. Unless, therefore, the country subject to a high tax in this shape is more than usually stimulated in its powers of production—unless it is in the enjoyment of monopoly profits, the limit to an unfavourable exchange will very soon be reached. The principles or tests, therefore, that apply on ordinary occasions in regard to this subject, are inapplicable in other periods when wars unexampled in extent and duration occur, which derange all the ordinary relations of commerce. It was this circumstance that produced so anomalous a state of the exchange in England during the latter period of the war in which she was engaged, and rendered the phenomena so inexplicable on the ordinary principles. The limit to an unfavourable exchange in the ordinary state of things, is unquestionably the expense of transmitting money from the debtor to the creditor country in payment of a balance. It would consequently be impossible, when the usual level of prices between countries is not for a considerable period disturbed, for banking establishments to suspend payments in specie and continue the suspension, unless the country in which they were situated was deriving very high profits from its foreign commerce. The natural limitation of mercantile profit, and of the disposition to borrow with a view to such profit, is the check given to consumption by an unfavourable exchange of too long continuance. Every inequality of this nature is speedily corrected, if the high prices of the imports are not counterbalanced by the proportionally high prices abroad of the exports.

In determining the question, whether the unfavourable exchange in England arose from an increase of the government expenditure or the undue issues of the Bank of England, it is indifferent to the point at issue, if this expenditure were defrayed by loans, in what mode these loans were effected. The two circumstances of an increased public expenditure and enlarged issues, were in necessary connexion. If the government by means of its loans diminished the amount of capital which would have been otherwise employed in commerce, the Bank by replacing the capital which was withdrawn for public expenditure, did not issue more paper perhaps than was necessary for the *due wants of trade*, but its issues did add to the whole quantity of circulating medium above what was required for the *wants of the country at large*, in proportion to the amount of capital borrowed by government. The heavy public expenditure, therefore, was the *origin* of an issue of paper by the Bank of England, not probably beyond the fair demands of commerce, but certainly beyond what could be added to the circulation without producing considerable disturbance of prices, and leading to an exportation of specie equal to the excess of the whole quantity of currency compared with the number of exchanges to be effected. In one sense, then, the circulating medium may be said to have been redundant, whilst in another sense, it may be asserted to have been in its due quantity, or in fair proportion to the business it had to perform. If this view of the subject be correct, the difference of opinion as to the origin of the unfavourable exchange in England, in the period already referred to, is reconcileable.

We find that the facts correspond with this explanation. The exchange was at par in England from the period of the Bank restriction until the very heavy expenditure required to maintain the British armies in the Peninsula arose in 1808. As this expense increased, the exchange became proportionally unfavourable. The great exportation of coin and bullion that almost immediately took place, in consequence, was partly, perhaps, the *cause*, first, and then the *effect* of the unfavourable exchange. They were exported, in the early period of this expense, on public account, in addition to the sums required for the pay of the forces, on the same principle that their export takes place on the *necessity* of an immediate import of corn from a failure of the harvest. The *subsistence* as well as *pay* of the troops in the Peninsula required an immediate and a direct remittance in specie, to purchase a portion of the bread stuffs with which they were at that time supplied by neutral nations. A circuitous remittance by bills is too slow an operation in such pressing circumstances, as is the export of goods in payment for such necessary supplies. The greater the quantity of gold exported, however, on public account, necessarily lessened the quantity sent abroad on private account. But if individuals sold to the government, it must have been at a price which was equivalent to the profit they would have derived if they had disposed of their bullion in any other mode. The premium on exchange would of course measure this profit, for by exporting bullion and drawing a bill against it, the possessor of this article would gain a sum, deducting the expense of transportation, equal to what he would have derived by selling his bullion to government, or to the profit he would have made

in the home market on the commodities he would have obtained in exchange for it in foreign markets.

But although the advance in the price of bullion in the first year of the great public expenditure in the Peninsula, may be thus entirely accounted for, from the government demand, this cannot explain its continued high price, until the end of the war. After time had been allowed to provide, in other modes, for this expense, a very small part of it would be defrayed by the exportation of coin or bullion. The only satisfactory explanation of the continuance of the high price of the precious metals until the close of the war, is to be found, therefore, in the increased individual demand that took place, for the purposes both of hoarding and of profit to be made by exportation, in addition to the more limited demand, at the same period, by the government itself.

I have before observed that the causes which affect the price of bills are various. It is therefore obvious that these causes may act all in the same direction or in opposite directions—or, in other words, the exchange will become proportionally unfavourable to a particular country if all those circumstances by which it may be affected co-operate. The *computed* exchange will then express the *sum* of their *united* influence; whilst if the various causes by which it may be affected are of *equal* influence in *different* countries trading together, the value of their exports will be equally diminished, and the exchange between them will not vary. Thus, if the exchange between two countries having commercial intercourse together, is at par, and a deficient harvest should occur in one of them, the value of its exports will lessen proportionally, but if the country from which the supply of corn is pur-

chased shall have issued a quantity of paper, by which it lessened the value of its exports in an equal degree, the exchange between them would continue at par; or if one country increases its taxes to the same extent that another enlarges its paper issues or alters its standard, the value of their exports would, in the same manner, be reciprocally and equally reduced, and the exchange between them would not vary. But if whilst a particular country is compelled to import a portion of its corn, it, at the same time, increases its taxes and enlarges its issues of paper, or alters its standard, its exchange with another, the value of whose exports is not affected by either of these circumstances, will become unfavourable to the degree of the combined influence of all these causes.

CHAPTER VII.

COMMERCE.

THE intercourse between countries is more or less a trade of barter as the market prices of the commodities they respectively export and import agree with or differ from their natural prices. All other circumstances being equal, both parties gain in proportion to their skill, capital and natural resources. But this is no longer true when taxes, restriction no the free circulation of capital, &c. in a particular country, so diminish the relative value of its productions as to compel it to exchange the same quantity of them for a less quantity of those commodities it is in the habit of importing. This is attended by an immediate loss to one of the parties and an eventual loss to the other, for the nation which obtains a higher price for its products than usual, by such an unequal interchange, proportionally restricts their market and consumption. The intercourse between the countries so circumstanced ceases, at such time, to be purely a trade of barter. The level between the quantity of money and the quantity of commodities it has to circulate of the country whose trade is subjected to this disturbing influence, is necessarily altered, and

the profits of its merchants are partly derived from the exportation of its circulating medium. The commerce between different countries is in its nature and final results like that between the different districts of the same country. The diminution of profit in one quarter must be accompanied or followed by diminished demand and reduced profit in some other, and although the reaction is not so quickly communicated from country to country as from one district or employment to another in the same country, still it much sooner takes place, I believe, than is commonly imagined.

There would appear to be no difficulty in determining in what manner mercantile profit is derived, and to point out the sources of that mutual gain which states enjoy in exchanging what they want less for what they want more. It is a familiar principle, that every reduction in the prices of commodities, when demand is properly proportioned to supply, gives extension to the foreign as well as domestic market, and that states are reciprocally benefitted by this reduction of prices when general, or, which is the same thing, by an equal augmentation on both sides of the quantity of consumable products. But although it has been admitted that an increase in the *quantity* of commodities is the consequence of an extension of foreign trade, it has been denied that an increased *value in amount* is derived from such extension. Mr. RICARDO is the author of this new theory of commerce.* It seems a necessary consequence of his peculiar view of value in other parts of his work, as distinguishable, under all circumstances, from wealth.

* Principles of Political Economy and Taxation, chap. 6, p. 107.

Mr. RICARDO invariably assumes that what is gained in value by one class of the community is lost to some other. This doctrine is an unavoidable inference again from the principle, that the value of commodities is determined, from first to last, by the quantity of labour which they have cost, and that as more or less is paid for wages and rent, more or less remains for profit, and *vice versa*. As Mr. RICARDO had thus determined that profits could not increase unless wages and rent diminished, or profits diminish unless wages and rent increased, he was bound to follow out this principle to its consequences, and to insist, that, as profits, wages and rent together always continued of the same value, however they may be divided, no greater value in amount could be derived from the importation of a larger than a smaller quantity of commodities. On the same principle, as nothing can increase profit but a diminution of wages, he was bound to conclude that as wages are not lowered, unless the commodity imported constitute the subsistence of the labourer, the gains of the merchant are not increased, any more than those of the producer, by any extension, however great, of the foreign market; but, according to this principle, the profit of the merchant must be always of the *same money value*, which leads inevitably to the conclusion that Mercantile profit is stationary, whilst the profit of the other productive classes is increasing.

Now, although, as commodities increase in quantity, or, which is the same thing, fall in price, the profits of their producers continue always of the *same money value*, this is not true of the profits of the merchant. It will be recollected that the merchant's gains are always received as well as estimated in money, and,

although his real profit is in proportion, as in every other case, to what money will purchase, the quantity of both money and real profit is always equal in his case, unless some disturbance of prices has occurred. But in the case of the *producer* his money and his real profit are always unequal, if no such disturbance of prices has taken place. We have endeavoured to show that there is the same money profit, or value in money amount, received by him when his commodity is at a *less* as when it is at a *greater* price, if its quantity has at the same time proportionally increased. But no increase of mercantile profit can take place (if relative prices are not altered by some disturbing influence) without an augmentation in the quantity of money obtained in exchange for an increase of commodities.

Suppose a manufacturer of cloth was to produce this year 1000 yards and to obtain one dollar per yard for it, should he the next year augment the quantity 25 per cent. he must submit to a reduction of price in this proportion—he must accept of 80 cents per yard when its quantity is increased in the above ratio ; for 1250 yards at 80 cents per yard will bring the same amount of money as 1000 yards at one dollar per yard. This is the situation of the *producer* ; but the case is different with regard to the merchant whose business it is to export cloth in exchange for some other commodity. He must receive a larger money amount for a greater than a smaller quantity of commodities, or his profits will be below the general level. Thus, if we suppose him to export 1000 yards of cloth when its price is one dollar per yard, and to derive 25 per cent. profit, he must sell the commodity he imports for \$1250 ; but when he invests this amount in the pur-

chase of cloth, the quantity having proportionally increased, he must obtain \$1562 50, for the goods he imports in return ; for as the gain of the manufacturer of cloth is 25 per cent. when its quantity, or, which is the same thing, the quantity of other goods he obtains for it has increased in this ratio, the possession of the above sum is necessary by the trader in this article to put him on the same footing in regard to profit. Unless it be admitted that the merchant receives a larger money amount for a greater than a smaller quantity of imported commodities, his profit will continue *stationary* whilst that of the manufacturer or producer will *increase*. Accordingly, we find that this is the precise conclusion to which MR. RICARDO's reasoning leads.

"If," says he, "by the purchase of English goods to the amount of £1000 a merchant can obtain a quantity of foreign goods, which he can sell in the English market for £1200, he will obtain 20 per cent. profit by such an employment of his capital ; but *neither his gains nor the value of the commodities imported* will be *increased* or diminished by the greater or smaller quantity of foreign goods obtained. Whether, for example, he imports 25 or 50 pipes of wine, his interest can be no way affected, if at one time the 25 pipes and at another the 50 pipes equally sell for £1200. In either case his profit will be limited to £200, or 20 per cent. on his capital, and, in either case, the same value will be imported into England."*

But if the manufacturer or producer of goods parted with in exchange for wine obtains 50 pipes or the value of 50 pipes at one time and 25 pipes or their value at

* *Principles of Political Economy and Taxation*, chap. 6, pp. 107, 108.

another, how can the conclusion be resisted that his profit is 80 per cent. above that of the importer of wine, for the absolute increase of the manufacturer's or producer's profit in this case is 100 per cent. as the quantity of wine he has obtained in exchange for his goods has doubled; but if the importer of this article gets no more than £1200 when 50 pipes as when 25 pipes are imported, he obtains no part of this increase—in other words, his profit remains stationary, whilst that of the producer or manufacturer has doubled.

Taking Mr. RICARDO's own criterion of value, or regulator of price, to wit, the quantity of labour which a commodity from first to last has cost, surely an increased quantity of such commodity cannot be transported from the place of production to that of consumption, without an additional quantity of labour to what has been employed in the transportation of a smaller quantity of such commodity. The value must in such case proportionally augment. But not only must the sum expended for the labour employed both in the production and transportation of an increased quantity of commodities, be replaced by the additional value for which they sell abroad, the capital, with the usual profit, employed, must be, from first to last, also replaced, or the requisite quantity of produce could not come to market. How under these circumstances can it be said "*no extension of the foreign market will either increase the gains of the importer or the value in amount of the goods imported?*"

But it is not mercantile profit merely that is kept stationary, according to this theory, whilst markets are on every side extending and products increasing—profits generally are made subject to the same law, namely, that the quantity of labour which commodities

have cost regulates their value. It is not in consequence," says MR. RICARDO, "of the extension of the market that the rate of profit is raised, although such extension may be equally efficacious in increasing the mass of commodities, and may thereby enable us to augment the funds destined for the maintenance of labour and the materials on which labour is employed."**

But it is by increasing the mass of commodities that the general rate of profit is augmented, and from no other cause. To increase the mass of commodities—to augment the powers of production—to lower the prices of products generally, are all terms expressive of equivalent effects. What do we intend to assert when we say that capital is augmented, by an increase in the rate of profit, if it is not meant that the mass of commodities is increased?

But MR. RICARDO makes an exception to this principle, as the following passage will show. "It has been my endeavour to show throughout this work, that the rate of profits can never be increased but by a fall in wages, and that there can be no permanent fall of wages but in consequence of a fall of the necessaries on which wages are expended. If, therefore, by the extension of foreign trade, or by improvements in machinery, the food and necessaries of the labourer can be brought to market at a reduced price, *profits will rise*. If, instead of growing our own corn, or manufacturing the clothing and other necessaries of the labourer, we discover a new market from which we can supply ourselves with these commodities at a cheaper price, wages will fall and profits rise; but if

* *Principles of Political Economy and Taxation*, chap. 6, p. 112.

the commodities obtained at a cheaper rate, by the extension of foreign commerce, or by the improvement of machinery, be exclusively the commodities consumed by the rich, no alteration will take place in the rate of profit. The rate of wages would not be affected, although wine, velvet, silks, and other expensive commodities, should fall 50 per cent. and consequently profits would continue unaltered.”*

This limitation of the principle, that no extension of foreign trade can increase the rate of profit, was necessary from Mr. RICARDO’s peculiar view of labour as the regulator of the price of raw products, and through them of the rate of wages and profits. But it requires the concession that the manufacturers of articles of necessity, or those consumed by the poor, are in the enjoyment of higher profits than the manufacturers of articles of mere luxury, or those consumed exclusively by the rich. It requires the further concession that the importers of necessities are also deriving higher profits than the importers of luxuries. How would luxuries be either produced or imported on such a supposition, or how is the level of profit to be maintained under such circumstances? What motive could the manufacturer of articles of luxury have in increasing the quantity of his goods by machinery, if he is tasking his ingenuity constantly for the advantage of others in lowering the prices of his products? or what inducement could exist for the importer of such articles, in enlarging the bounds of his enterprize, to discover new markets whence they may be bought at cheaper rates, if this is to redound to the exclusive benefit of their consumers?

* *Principles of Political Economy and Taxation*, chap. 6, pp. 112, 113.

Let us, however, for a moment, admit the principle that the quantity of labour employed in raising raw products is the sole regulator of their price, and through them of the rate of wages and profits, and behold the consequence that follows. The consumers of cheap commodities, whether manufactured at home or procured from abroad, will be soon in the condition of persons who have accumulated from savings until their accumulations have ceased to be of any value. What is it that gives value to capital? Is it not that it may be employed by its owners or borrowers in increasing the enjoyments of a different portion of society to themselves, who are at the same time adding to the enjoyments of some other portion? Demand insures demand, and unless it is co-extensive with supply, of what use is the greatest sum of the necessities and conveniences of life? Of what value is the greatest multiplication of commodities and the reduction in their prices, if what is in consequence saved and added to capital cannot be made available, under all circumstances, to an increase of profit?

Mr. RICARDO always speaks of reduced expenditure or the diminished consumption of necessities and conveniences as an equivalent effect with the increase of revenue, or as equally contributing with such increase to an augmentation of capital. "There are two ways," says he, "in which capital may be accumulated; it may be saved either in consequence of *increased revenue* or of *diminished consumption*. If my profits are raised from £1000 to £1200 while my expenditure continues the same, I accumulate annually £200 more than I did before. If I save £200 out of my expenditure while my profits continue the same,

the same effect will be produced; £200 per annum will be added to my capital.”*

But profits cannot continue the same in one quarter while expenditure is reduced in another, or increased in one quarter while expenditure continues the same in another, for expenditure must keep an equal progress with profit, if all classes of producers are to benefit by an interchange of their respective productions. It is not individual profit but profit generally—not temporary but permanent effects, to which Mr. RICARDO alludes, we presume, in the above passage. Profit may be temporarily raised in one employment compared with another, from causes which disturb the proper distribution of capital and in consequence alter relative prices; but no general or permanent increase of profit can take place unless consumption in one quarter keeps an equal progress with production in some other—unless, in short, demand, whether for the necessaries and conveniences of life, or for articles of productive investment, is equal to the supply of the whole mass of commodities of every kind. It follows that profits cannot continue the same if expenditure be reduced, or raised if expenditure continue the same, without destroying the balance between produce and consumption. Commodities would cease to be produced if they were not consumed.

“The merchant,” says Mr. RICARDO, “who imported wine after profits had been raised from 20 per cent. to 40 per cent. instead of purchasing his English goods for £1000, must purchase them for £857, 2s. 10d. still selling the wine he imports in return for these goods for £1200; or if he continued to purchase his

* *Principles of Political Economy and Taxation*, chap. 6, p. 110, 111.

English goods for £1000, must raise the price of his wine to £1400: he would thus obtain 40 instead of 20 per cent. profit on his capital, but if in consequence of the cheapness of all commodities on which his revenue was expended, he and other consumers could save the value of £200 out of every £1000 they before expended, they would more effectually add to the real wealth of the country; in one case the savings would be made in consequence of an increase of revenue, in the other in consequence of diminished expenditure.”*

If Mr. RICARDO distinguishes between individual and general gain, there is a *more* effectual addition to the real wealth of a country from the cheapness of all commodities than from the increase of revenue of one or a few of its inhabitants; but if he does not intend a distinction of this kind, there is a *less* effectual addition to the real wealth of a country from the increase of profit of one or a few of its inhabitants, than from the cheapness of all commodities. The rise in the price of wine cannot at all add to the real wealth of the society, for it must be followed by an abstraction of demand in some other quarter—it is simply a temporary advantage obtained by one class or portion of the community at the expense of some other class or portion. “If,” says he again, “by the introduction of machinery the generality of the commodities on which revenue was expended fell 20 per cent. in value, I should be enabled to save *as effectually* as if my revenue *had been raised* 20 per cent.; but in the one case the rate of profit is stationary, in the other it is raised 20 per cent. If by the introduction of cheap

* Principles of Political Economy and Taxation, chap. 6, p. 111

foreign goods, I can save 20 per cent. from my expenditure, the effect will be precisely the same as if by machinery I had lowered the expense of their production, but profits would not be raised.”*

Mr. RICARDO is perfectly correct if he refers to *individual* profit when he says, that savings are made with as much effect by the cheapness of commodities as by the rise of revenue, making the rise of revenue in such case to proceed from the advance in price of one or more commodities ; but if he refers to permanent and general effects, it is impossible to conceive a difference between a rise of revenue and the general cheapness of commodities in their effects on the wealth of society.

But Mr. RICARDO makes the rate of profit stationary in the one case and raises it in the other. It is stationary when the quantity of commodities is increased—when the greatest stimulus is in action to add to the quantity—when their prices have fallen and consumers are able to purchase a larger quantity than before for the same money amount, and it is permanently raised when the rise has occurred from accidental causes—from a disturbing influence which must soon cease to act.

* *Principles of Political Economy and Taxation*, chap. 6, pp. 111, 112.

and the results were very similar to those of the first study. The second study, which examined the effects of a 1000 mg/day calcium supplement on bone mineral content, found a significant increase in bone mineral content in the lumbar spine and in the forearm, but not in the lower extremities. The third study, which examined the effects of a 1000 mg/day calcium supplement on bone mineral content, found a significant increase in bone mineral content in the lumbar spine and in the forearm, but not in the lower extremities. The fourth study, which examined the effects of a 1000 mg/day calcium supplement on bone mineral content, found a significant increase in bone mineral content in the lumbar spine and in the forearm, but not in the lower extremities.

student (youngster) who will receive more and will tell the teacher what he or she wants to do with him will be a good opportunity for a teacher to identify potential difficulties and to implement necessary and sensible—desirable—pedagogical measures which make the learning, not the child, the center of attention and the teacher's role the one to encourage free expression, a free exchange of ideas and several kinds of creative action. Teachers cannot ignore this and several years of experience have not yet had a sufficient impact on the teacher's mind to make him or her believe that this is the best way to teach.

CHAPTER VIII.

TAXATION.

IF the principles laid down in the preceding chapters be correct, the final equalization of taxes results unavoidably from those principles. Whether they are laid on wages or profits, on necessaries or luxuries, on income or capital, the burthen must fall eventually on all classes of producers. It must always be borne in mind that every alteration of prices from taxation must be either accompanied or followed by a change in the due proportion between demand and supply. On this principle there can be no doubt that all classes of producers are finally affected, in an equal degree, by every variation in the state of the demand and supply caused by taxation. The time that it takes to shift capital from those employments that yield relatively lower to those that yield relatively higher profits, will determine how much longer a period one class of producers will have to sustain the burthen than another. If there are no restrictions on internal intercourse—if capital and labour can freely circulate between different employments, the period that the tax

will be unequally borne will be very short. The tendency to an equilibrium of burthens as well as benefits in society is too strong to be resisted by any but the most powerful circumstances. I will then first trace the consequences of a tax on *wages*.

A tax on wages will lessen the labourer's command of the necessities of life, for he will have a smaller money amount than before to devote to the purchase of necessities, unless he should increase the quantity of his personal exertion in proportion to the amount of the tax. Such a tax will not raise the price of labour, for that depends on the proportion between the demand and the supply of labour, which is not affected by the tax. The quantity of labour in the market is not reduced, nor is the ability of the capitalists increased to employ a greater quantity than before. It will be recollected that we are speaking of the immediate effects of such a tax. But such a tax, if it lessen the quantity of money which the labourer can command, will operate on profits. It will immediately diminish the demand for necessities, in proportion as it takes from the labourer the power of purchasing them, unless, as before remarked, he increase proportionally his personal exertion, or, which is the same thing, he is both able and willing to consume a greater quantity of food. If he is unwilling or unable to do this, the cultivator's profits must be reduced. This effect on the profit of the cultivator must be to diminish his demand for other commodities. The profits of all producers must come to a level, and the prices of all commodities, after the equilibrium is restored, will be prevented, by the tax, from falling to that point to which they would have been reduced if the tax had not been imposed.

The consequences, however, will not stop here on the above supposition. The fall of profit will lessen the demand for labour, and the labourer will be affected, by the operation of the tax, in lowering his money wages below that point to which they ought naturally to fall. As he will be unable to shift the tax from himself to others, it will proportionally diminish his comforts. If the tax augments so much as to operate as a restraint on the increase of the lower orders, it will operate in an equal degree to prevent the increase of capital. Population and the means of employing and supporting it, must, in a natural state of things, come to a level, quantity for quantity.

The effect of a tax on *profits* would not be different. It would finally reach the labourer by lessening the demand for labour, and thence reducing his money wages below their natural limit. The price of necessities, as in the case of a tax on wages, will fall from the inability of the labourer to purchase as large a quantity as when his wages were higher, unless, as in that case, he increase his personal exertion in proportion to the tax. The cultivator's profit must of course be still further lessened, in the ratio of the reduced power of the labourer to purchase food, on the supposition, as before stated, that he is neither able nor willing to make any further sacrifice to obtain it. But this reduced consumption of necessities will operate to lessen the demand for the objects of consumption of the cultivator also, until by the cessation of demand proportionally in every quarter, the tax will be finally equalized in its effects.

A tax on necessities would be followed by the same ultimate consequences. It would occasion a fall in the profits of their producers, should the demand have

been proportionally diminished, and it must be diminished, unless the consumers increase in the same proportion, their personal exertion, if labourers, and lessen their consumption of other things, if capitalists. But this fall of the profits of the producers of necessaries will, by lessening their demand for other commodities, reduce the profits of their producers also, in connexion with the wages of labour. The prices of the whole mass of commodities will finally settle at a higher than their natural level.

A tax on luxuries would not be different in its final effects. It would, by reducing the demand for them, affect their producers, and as the producers of luxuries are the consumers of necessaries, it would eventually act on these also. According, then, to this explanation, whatever commodity is selected to be taxed, the effect will be finally felt on the producers of all other productions, and it will be delayed in proportion to the greater or less facility of removing capital from the least to the most beneficial employment. A tax, whether laid on revenue or capital, if this view be correct, would be attended by similar results. If the tax is imposed on revenue, and the capitalist saves from his expenditure, in proportion to the tax, in order that he should not diminish his capital, he will necessarily lessen demand for the commodities of some other producer, and this will finally react on himself. The same consequence precisely would follow if he had deducted the amount of his tax from his capital.

It is the increase of productive power that adds to capital and not savings from ordinary expenditure—not reducing consumption, for it is constantly increased consumption that gives the most effective stimulus to the inventive powers and industrious efforts of produc-

cers. The actual consumption is necessary to the actual production. It is not more injurious, therefore, to impose a tax on capital than on revenue. This is contrary to Mr. RICARDO's opinion, who thinks the effect will be the same if the capitalist pays the tax either by reducing his expenditure or by an increase of his productive powers; but the diminution of consumption and the general multiplication of products at the same time, are incompatible effects. The additions that are made to capital from revenue result from enlarging the market, both domestic and foreign—from inducing an increase of consumption generally, by an augmentation of the quantity of commodities and a proportionate reduction of their prices. It is, therefore, not the same thing should additional taxes be met by a diminished consumption as by an increased production, as stated by Mr. RICARDO. What is saved from revenue, in consequence of taxation, is attended by diminished demand exactly in the same degree as if it had been deducted from capital.

The general inference from the above view is, that the price of a taxed commodity will not *necessarily* rise.* If the consumption diminishes of this particular commodity, in proportion to the amount of the tax, the producer will be unable to reimburse himself, in

* When the demand for any commodity is increased, the supply remaining the same, there is an increased quantity of money given in exchange for the same quantity of such commodity; but when the supply of any commodity is diminished, the demand remaining the same, there is the same quantity of money given in exchange for a less quantity of such commodity—in both cases the price rises. In taxation, however, here may be a rise of price without any increase of demand or diminution of supply—all that is necessary to produce such a rise is, that the demand for the taxed commodity should not diminish, but the demand for some other commodity must fall, in proportion as the quantity of money given in exchange for it is less than the quantity given in exchange for the taxed commodity is greater than before.

the increased price of his commodity, and to throw any share of the burthen of the tax on the consumer. But whether the price of a taxed commodity rise or not, relative prices will be altered. If the consumer should not lessen his demand for this commodity, he must for some other, which, by reducing its price, in proportion as the taxed commodity has risen, will necessarily alter their former relation to each other as to prices and demand, and by causing the flow of capital from the production of that which has fallen to that which has risen, restore the equilibrium of prices and profits between the disturbed employments. If the price of the taxed commodity should not rise, from diminished demand, the power of purchasing other commodities by the producers of the taxed commodity, will be reduced in proportion to the tax. The prices of those other commodities will fall, therefore, and relative prices will alter. The level will be restored by the abstraction of capital from those employments which derive relatively lower and its removal to those which enjoy relatively higher profits.

We are aware that some of the above conclusions militate against the received doctrines of taxation. The opinion that the labourer pays no portion of that contribution, in the form of taxes, which society exacts from the rest of its productive classes, has received an almost universal assent; but it is clear to my mind that the labourer pays his fair proportion* of the taxes,

* I am doubtful whether the labouring classes do not pay *more* than their fair proportion of the taxes, for they cannot reduce their numbers as the taxes increase with the same facility that supply is proportioned to demand in other cases. The effect is that the competition for employment always tends to keep their money wages below their natural limit, whilst the proportionate demand for food also tends to keep their real wages below that point to which they ought properly to fall.

either in an increase of personal exertion or in a diminution of his comforts and enjoyments. It is true that there is a point below which the labourer cannot suffer from additional taxation, for the increase of population will be arrested if a certain limit be passed. But where shall we place that limit? We see in the case of Ireland that its population is excessive, whilst its standard of enjoyments has fallen far below that of any civilized people with which history has made us acquainted, with the same advantages from situation for commerce, fertility of soil, &c.

We cannot fail to see also, that the heavy taxation, in every variety of mode, to which the English people are compelled to submit, although it has not proportionally reduced *their* comforts, still those comforts are purchased by a correspondent increase of personal exertion—by tasking the powers of the body in a higher degree than is exhibited in the case of any people, ancient or modern, with the same measure of freedom and the same extent of general wealth. The principle, then, that wages rise whenever a tax is imposed on them, or on the labourer's subsistence, must be received with the limitations I have given to it.

It must also be recollect, that, with the present arrangements of society in almost every part of the world, although an increased command of comforts will be invariably followed by an augmentation of population, it does not result that the *proper check* operates with the same efficacy and uniformity AGAINST as the *stimulus* to an increase of numbers. Mr. MALTHUS has admirably explained and illustrated, from the past and present condition of mankind, the *tendency* of population to multiply faster than food can be provided for it. All the institutions of society give the

fullest play to the principle of increase, whilst there is scarcely any room allowed for the influence of that check which Mr. MALTHUS has well denominated *moral restraint*. It results, however, from this view, that the price of labour is *not* a correct barometer of the wants of society with regard to population, as asserted by this writer,* for the *same* numbers may subsist on a much smaller quantity of food at one period than at another, or the same quantity may be purchased by a greater sacrifice of toil. There is, therefore, no certain or invariable standard of enjoyments for the labouring class. The amount of their comforts is not only very different in different countries, but very different in different periods in the same country.

If Mr. MALTHUS had stated the principle of population with the qualification, that the price of labour is a correct criterion of the wants of society with regard to it, or as expressing the relation between the supply of provisions and the demand for them, where the *proper preventive check* operates with the same efficacy and uniformity *against* as the *stimulants* to an increase of numbers, there are none who could dispute the proposition. He has, to be sure, spoken of the price of labour, as expressing the wants of society respecting it, when that price is left to find *its natural level*, but this expression is obviously used in reference to those particular institutions which disturb the proper proportion between the demand and the supply of labour, such, for instance, as assessments for the relief of the poor, and *not* to the entire structure of the social system, in connexion with the whole body of laws and the habits

* See his able work on Population, first American Edition, vol. 2, pp. 164, 165.

superinduced on them. The error of Mr. MALTHUS consists, then, I think, in stating that *positively* as a *Law of Nature*, which, for what we know to the contrary, may be the result of an imperfect social organization.

It is certainly possible to imagine the existence of a state of society in which the *proper preventive check* in regard to population may be in full activity, whilst every possible developement being given to the capacities of the earth for the production of subsistence, the *stimulus* to should not be more active than this *check AGAINST* an increase of numbers. The respective ratios of the augmentation of food and population might, in such a state of society, vary materially from those exhibited in any period past or present. The rate of production would, on this supposition, probably increase, whilst the rate of population would probably diminish, and the relative rate of increase might be equal, or, which is the same thing, the absolute rate of either might never exceed that of the other.

Without indulging, therefore, in dreams of perfectibility, it is not venturing on visionary speculations of unattainable or impossible improvement to infer, that if the institution of primogeniture were abolished wherever it prevails, with every species of monopoly, supposing the security of person and property complete, and the public burthens moderate, the rate of increase in the production of food might greatly augment; whilst the more ample leisure for instruction permitted to the labouring classes—by allowing them to receive sound and salutary lessons on the subject of population, or those maxims of prudence and foresight necessary to their comfort and respectability—

might give much greater room than at present for the action of the check entitled by Mr. MALTHUS, *moral restraint*. It is impossible to foretell the precise effects of such an arrangement of the social elements, or to say what would be the relative ratio in the increase of food and population, on such a supposition; but that it would be very different from that which is generally exhibited in the present or any past condition of the species, I am satisfied.

THE END.

ERRATA.

Page 12, note 1, line 2, for "labours" read *labourers*.
20, note 2, line 10, for "the" read *be*.
23, line 24, for "so also his corn rent," read *his corn rent by the absolute quantity of raw produce*, and dele the words "a part of" immediately following.
47, line 9, for "to" read *with*.
77, " 26, for "proportions" read *proportion*.
81, " 1, insert *from* between the words *prevented* and *falling*.
103, " 7, for "restriction" read *restrictions*, and for "no" read *on*.
119, " 29, for "his tax" read *the tax*.
120, note, line 6, for "here" read *there*.





UNIVERSITY OF CALIFORNIA AT LOS ANGELES

THE UNIVERSITY LIBRARY

This book is DUE on the last date stamped below

5 FEB 5 1976

RECEIVED
MAIN LOAN DESK

1 APR 6 1976

LO-1000

1 1976

MAR 10 1976

A.M. 7|8|9|10|11|12|1|2|3|4|5|6 P.M.

MAR 2 1976

INTERLIBRARY LOANS

MAR 4 1976

RECEIVED DATE OF RECEIPT

RENEWABLE

RECEIVED
MAIN LOAN DESK

APR 2 1976

A.M. 7|8|9|10|11|12|1|2|3|4|5|6 P.M.

Form L-9
20m-1, 142(5519)

UNIVERSITY OF CALIFORNIA
AT
LOS ANGELES

20 541 484 2



PLEASE DO NOT REMOVE
THIS BOOK CARD



THE LIBRARY OF THE UNIVERSITY
OF CALIFORNIA LOS ANGELES

University Research Library

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55
ISSN 1302-02

